

News in brief

King's reunion comes nearer

The plan to reunite King's College Hospital Medical School with King's College London, came a step nearer last week with the second reading of a private Bill in the House of Lords.

The Bill, which now goes before a Lords' committee, is expected to have an easy passage although the timing is unsure. The new body will be known as King's College School of Medicine and Dentistry.

The decision is part of a rationalization scheme for medical teaching in London. While King's rejected the recommendation of the Flowers report in 1980 that it phase out its pre-clinical medical and dental course, it accepted a subsequent proposal from the University of London senate to bring the medical school back into the college. The two were reunited in 1909.

Pay deal rejected

Scotland's tertiary lecturers have rejected a pay offer of 3½ per cent. But Dr Malcolm Green, spokesman for the Labour-dominated management side of the Scottish Joint Negotiating Committee, said management did not regard this as a reasonable offer.

They had been bound by government restrictions, and felt a reasonable figure, taking inflation into account, would be 3 per cent. The Scottish staff side is still pressing for its original claim of 13 per cent.

History memorial

Edinburgh University is to establish a history award in memory of Anne Lewis, a former student who died of cancer last year after a three-year illness. It is intended for undergraduates with a physical disability or handicap.

Mrs Lewis graduated with first class honours in history last summer, and in October was presented with an award for outstanding achievement by Edinburgh's principal, Dr John Burnett. She died the following month.

Coronation feat

The saga of Deirdre, Ken and Mike will be riveting Scots educationists a week on Saturday. Coronation Street will be one topic at a media studies conference for lecturers and teachers sponsored by the Scottish Film Council at Queen Margaret's College, Edinburgh.

Poly first

The first course leading to an MSc in information technology has been given approval at Leicester Polytechnic by the Council for National Academic Awards as part of the Government-funded initiative. Forty students will join the one-year course when it starts next year.

Daresbury future more secure

by Jon Turney
Science Correspondent

The future of the Science and Engineering Research Council's Nuclear Structure Facility at Daresbury in Cheshire looks more secure as a result of an internal report put before the council at its meeting last week.

The report was produced by a committee under Professor Bill Mitchell of the Clarendon Laboratory in Oxford, set up after a recommendation last year from the Advisory Board for the Research Councils that SERC should consider its future level of support for nuclear structure physics.

The ABRC's 1982 forward look warned that the council might soon have three large facilities: the Nuclear Structure Facility, the Spallation Neutron Source and the

Synchrotron Radiation Source which could not be fully exploited because of their expense.

The giant electrostatic particle accelerator at the heart of the Daresbury facility faced numerous problems in early trials, but is now operating satisfactorily. The committee's report says that in view of the investment already made and the unit's high scientific potential funding for the experimental programme should go ahead. However, it says this should depend on reliable operation at the target energy of around 20 million electron volts for two or three years.

The report also says there should be no efforts to develop higher energies for the time being and that some economies should be made in the unit's current effort which cost £16m in 1981-82. It suggests that the present scientific staff of 146 could be cut by about 20.

No firm decision has been taken on the report's recommendations, which the council referred to its nuclear physics board for discussion. But the report will almost certainly pave the way for Daresbury to develop its scientific programme with the machine working in its present state.

The Nuclear Structure Facility will offer a rare opportunity for British scientists to carry out high energy experiments in particle physics without going abroad. Early experiments planned include investigations in atomic physics, decay of unstable nuclei and heavy ion reactions.

Scottish reforms hit snags

by Olga Wojtas
Scottish Correspondent

Controversial proposals for higher education from the Tory Reform Group in Scotland have been delayed because of disagreements within the group.

The proposals are understood to include a compulsory gap of at least a year between school and higher education, student loans instead of grants and ordinary degree courses being shortened from three years to two, ideas which have all run into considerable opposition.

The recommendations were expected to be sent to the Government this month, but a final paper will not now be produced until the end of March at the earliest. The executive committee has already sent the proposals back to the special education committee three times within six months.

Mr David Bleiman, regional official for the Association of University Teachers, attacked the proposal for student loans. "We would very much oppose the idea of students having to mortgage their future in order to study," he said.

And Mr Bob Maclean, chairman of the Scottish National Union of Students, said it was extremely worrying that even the Tory "wets" were beginning to talk about student loans. He also criticized the proposal to reduce the three-year ordinary degree as a cost-cutting exercise with no educational justification. "We are against any change in degrees which would result in a more cramming approach to education," he said.

Among the measures rejected are fee concessions for newly-arrived immigrants, targeted schemes under the aegis of the Government departments concerned and a programme

Fee concessions for immigrants rejected

by John O'Leary

Proposals for trade-related fee concessions and state scholarships to be awarded by universities and polytechnics are rejected in the Government's detailed policy document on overseas students.

The Foreign and Commonwealth Office report, *A Policy for Overseas Students*, describes its package of proposals as "the framework of a coherent and flexible policy closely geared to specific objectives." The statement closely follows the recommendations of an inter-departmental working group of civil servants which spent six months drawing up a draft response to the Overseas Students Trust report of the same name.

On the policy as a whole, the FCO report says: "It is of course possible to argue for a further expansion of the existing measures, or for other schemes of support. However, in present economic circumstances, and after a thorough assessment of the excellent work of the Overseas Students Trust, the Government considers that the policy on overseas students they are now adopting is in the national interest and in the interest of the students themselves."

Among the measures rejected are fee concessions for newly-arrived immigrants, targeted schemes under the aegis of the Government departments concerned and a programme

of awards designed to help individuals not catered for by other schemes. The report says that this last proposal raised objections on grounds of accountability if institutions were free to use public funds as they wished.

The most contentious and surprising rejection concerns the proposed trade-related scheme. Although the report says that this was dropped because discussions with industry did not make sufficient progress, it is understood that these talks involved an entirely different scheme to that proposed by the OST. Instead, the Government expects to pursue trade objectives through a small discretionary scheme to be financed by the FCO.

Although the detailed report follows the main tenets of last week's announcement by Mr Francis Pym, the Foreign Secretary, of a £60m programme of assistance for overseas students, it is less definite than was Mr Pym on the freedom of institutions to set their own fees. While last week's statement said that Sir Keith Joseph, Secretary of State for Education and Science, "was favourably inclined" towards institutional autonomy in the setting of fees, the new report promises only consultation on the issue. It claims that "within the prevailing legal framework institutions are already free to fix their own fees."

Warning to Buckingham

A future Labour government would review the status of the University College at Buckingham, newly granted a Royal Charter, Mr Philip Whitmore, the party's spokesman on higher education, said this week.

Labour has already threatened to revoke Buckingham students' right to mandatory awards, which was granted last year. Now the issue of the charter has created further controversy.

"Buckingham would have to be reviewed in the light of our overall plans for reorganizing higher education," said Mr Whitehead. "It was granted a charter in very premature fashion. The Council for National Academic Awards would have nothing to do with degree status for Buckingham, but this was a purely ideological decision."

He added that on any test of quality and maturity, Buckingham was less worthy of a charter than many polytechnics and colleges. The charter, which will be known as the University of Buckingham, would have to prove itself worthy of the charter and Mr Whitehead did not believe it could do so at present.

Mr Geoffrey Caston, secretary general of the Committee of Vice Chancellors and Principals, was also critical of the ease with which Buckingham had won its case.

Lord Beloff, Buckingham's first principal, said after the official announcement of the charter last weekend he had been confident that the college could show adequate academic standards, especially after the awarding of mandatory grants allowed for a better balance between home and overseas students. His only fears had been on the Privy Council's second criterion, that of financial stability.

Leader, back page

Tomorrow the Universe

Mr William Shelton, under secretary in the Department of Education and Science, inaugurated one of Britain's most promising showpieces in information technology - Project Universe - in London this week.

Universe, the Universities' Expanded Ring and Satellite Experiment, is basically a high-speed data network using the latest programming techniques. It links the pasted between distant computers at high speed. It is also a leading example of the three-way collaboration between government departments, industry and universities - the DES is keen to promote.

The £3m project was first conceived to join local computer networks like the Cambridge ring system developed under Professor Roger Needham and the Science and Engineering Research Council's own satellite links between major laboratories. It now also involves the University College, London, Loughborough University, GEC, Logica and British Telecom, as well as the Department of Industry.

Mr Shelton, speaking at London's Barbican Centre after opening the network at the Info '83 Exhibition, said Universe provided a model of the type of joint project which was bound to become more common, and it proved that Britain was at the heart of the information technology revolution.

The potential use of the network were shown by two of the universities involved. University College, London, used the satellite to transmit facsimiles of documents and the Loughborough team showed their system for rapid scan and transmission of television images.

When fully developed, remote linking of local area computer networks will be a major money-saver.

Call for engineering flexibility

More flexibility has been called for in engineering training. In a discussion paper published this week the Engineering Industry Training Board says that new technology will produce frequent changes in the skill requirements of many jobs.

This will mean more movement and retraining throughout engineering occupations and there should be a thorough re-examination of established training for craftsmen, operators, technicians, technicians, engineers and professional engineers, the EITB believes.

The board wants to see recognized arrangements for training to move

from one existing path to another, so that, for example, craftsmen can become technicians.

The EITB will soon publish detailed recommendations for training of technicians and graduates in industry, and will introduce a certification scheme.

A second paper published this week looks at the effect of the Manpower Services Commission's Youth Training Scheme on the engineering industry.

Development in Engineering Training and the Youth Training Scheme, EITB Information Papers 67 and 68.

Fowler warns of more cuts to come

by Felicity Jones

Mr Gerry Fowler, the director of North East London Polytechnic, has predicted a 15.9 per cent cut in budget in 1984/85 in addition to the 13 per cent cut already required for next year.

Students at the polytechnic were told that although course closures and reductions in student places would be avoided next year, it was very unlikely that this could be maintained.

An analysis of the polytechnic's estimates for 1983/84 reveal that lecturers' posts will be reduced by 9 per cent and non-teaching staff by more than 16 per cent. Mr Peter Carr, the students' union president, doubted whether such a reduction could be achieved by voluntary redundancies.

Other financial savings are planned through a 25 per cent reduction in maintenance costs, a 17 per cent cut in medical services and a 49 per

cent saving in the contribution to student housing at Temple Mills.

Students are concerned about the high cost of heating and light in the accommodation charges which they think covers more of the rent costs but cannot be recouped.

NEP's difficulties arise from a 10 per cent cut in its pool allocation combined with a 26 per cent cut in "topping up" money from its three local authorities. The problem will be compounded when this local authority "safety net" is removed altogether the following year.

Members of the National Association of Teachers in Further and Higher Education at Brighton Polytechnic were holding meetings this week after Mr Geoffrey Hall, the director, told staff that 45 teaching staff and 70 non-teaching staff would have to leave before the end of May. They are resentful because there appears to be no freeze on new staff appointments.

GLC wants bigger say in Brunel science park

Brunel university is unlikely to get backing for its science park from either private or public sources if it insists on total control over the project, the industry chairman of the Greater London Council said this week.

But the university says the park plan will definitely go ahead despite the breakdown in talks with the GLC over funding.

Negotiations for £1.5m in cheap loans from the council for a park at Uxbridge, Middlesex, have been going on for more than a year, but foundered last week because the university insists on a right of veto over would-be tenants.

Mr Michael Ward, the GLC industry chairman, said the council could not relinquish all control over development of the park as Brunel wanted. "It is not possible to let all the sites, for example, we would not want to stand by and fund empty sites," he said. "I can't imagine anyone agreeing to Brunel's terms."

The council had put the park

funds aside for two years, Mr Ward said, and he was disappointed that Brunel "suddenly blew cold" about the project. It was still keen to take part in a science park development and would welcome approaches from other institutions provided they were prepared to allow the GLC some form of control.

Brunel claims that experience of successful parks, particularly in America, shows that tight control over which companies came on to the site was essential. The university wants only high-technology firms doing research and development into areas related to its own work. It also wants to start in a small way and build up gradually.

Mr David Neave, secretary general of Brunel said that the university was involved in discussions with one or two other possible backers. About £1m was needed for a "modest first phase" and this could be provided by one or several different sources, perhaps with a contribution from the university.

Lords' ruling helps lecturers

Hundreds of college lecturers are expected to benefit from a House of Lords ruling which extends full employment rights to part-time staff whose contracts expire at the end of each academic year.

The Law Lords upheld an appeal by Mrs Georgina Ford, a temporary lecturer at Warwickshire College of Further Education, who was employed for eight years on contracts which covered the academic year but excluded the long vacation.

When her contract was not renewed at the end of the 1978-79 academic year, Mrs Ford was asked to work approximately 16 hours a week at the college, was declared ineligible to claim unfair dismissal and was asked to resign.

The Employment Appeal Tribunal and the Court of Appeal held that she had not been in

continuous employment because of the summer vacations.

But the Law Lords argued that the period of cessation of work was short compared to the duration of each contract.

Lord Diplock said that a worker should be regarded as continuously employed if the interval between two fixed-term contracts could be characterized as short relative to the combined duration of the contracts it separated.

Mrs Ford's case now goes back to an industrial tribunal for compensation. The National Association of Teachers in Further and Higher Education hailed the decision as a crucial victory. "The crazy notion that part-time teachers working loyally for years are not in continuous employment has now been laid to rest."

Where Manpower falls down

by Patricia Santinelli

The Manpower Services Commission fails to use further and higher education to the best effect, Mr John Sellars, the new chief executive of the Business and Technician Education Council, said today.

Too often it resorted to short-term expedient measures which underused the total education and training capacity of further and higher education, he told the annual meeting of the Association of Colleges for Further and Higher Education in London.

"Given all the external constraints, the MSC is doing a magnificent job, but it has so far given insufficient thought to the ways in which quality control can be exercised in respect of the content, orientation and standards of the products it is promoting," Mr Sellars said.

His council was able and willing to contribute to the difficult task of defining and providing relevant products of quality to meet the immediate and continuing needs of those young people and adults whom the MSC was seeking to help.

"In partnership with the MSC and the education system the BTEC can use its combined experience and expertise in ensuring that MSC schemes offer relevant education," Mr Sellars said.

At a meeting last week the BTEC determined some initial policy both for the long and short term. It will now make a comparison of present BTEC and TEC policies and produce a consultative document by the end of the year. This will go out for consultation to interested bodies for response by mid-1984 with the aim of producing a policy statement by July, and implementing it from 1985/86.

In the short-term the council intends to work towards a coordinated national provision for pre-vocational education, working in partnership with City of London Guilds.

The council also intends to develop courses which meet the needs of employers by combining the best elements in the present BTEC and TEC courses. BTEC and TEC awards are to be replaced by BTEC awards from December 1983.

London threat

continued from front page as highly charged. Some principals are highly opposed to any interference with tenure and were angry at the move. The issue now comes up for discussion at the next meeting of the collegiate council on March 14 when a decision on whether to issue a discussion document for circulation throughout the university will be taken.

Discussions on tenure, both based on the proposals of the Committee of Vice Chancellors and Principals, and through a university working party, have been going on for some months.

But Professor Quirk believes the CVCP document is over-simplified and not suited to London's special circumstances. He thinks it is essential to introduce some standardization into the university's contracts of employment and argued that by introducing redundancy clauses schools would be able to offer more security to many staff by converting temporary posts into permanent ones.

At present terms and conditions of employment vary widely in London, not just between academic and non-academic staff, but permanent and short-term staff but also between institutions.

The plan's supporters claim that if the university is forced to make redundancies in the next few years it would be unfair to select staff who are soft targets because they happen to have weaker contracts.

The discussion notes circulated at the meeting say that the Privy Council's suggestion of introducing redundancy by changing statutes would only affect new staff and that this point is not widely understood.

The timing of the proposals is likely to cause a furor among Association of University Teachers officials.



Leicester Polytechnic fashion student Alison Morris, who designed this children's wear, was one of those who took part in a fashion show held to mark a new blue dye. The dye, which has been especially designed by Sandoz a Swiss dye manufacturer, for polyester fibres, is said to represent a major breakthrough in colour intensity and was teamed with a new fabric supplied by ICI Fibres.

Tories pile on pressure for more private services

by Felicity Jones

More services could be carried out by private contractors in colleges and polytechnics if Conservative-led local authorities respond to the vigorous call to privatize services which came from the party's local government conference at the weekend.

Local authorities, mainly in the north, who have been slow to take resolute action were chastised by Mr Tom King, the Secretary of State for the Environment. He said it was their moral duty to provide services for the public at an economic price by putting services out to private tender.

Birmingham had saved £2.5m in one service, even though it was authority employees who submitted the most competitive tender and made the cuts.

Education scarcely received a single mention at the conference, but it is unlikely that it would be excluded from the drive towards privatization.

Professor David Smith, Opposition spokesman on the Inner London Education Authority, said afterwards that there was considerable scope to put cleaning, catering, maintenance and architect planning out to private contractors.

In response to criticisms over the way the target system for the rate support grant was penalising low-spending authorities, Mr King said he hoped the "emergency" target measures would not apply for long.

The future of the ILEA, with the Greater London Council, remains undecided despite resolute calls for its abolition. Lord Belwin, minister of state for local government, said they would have to look very carefully at the figures before taking a decision and do justice to the previous Tory administration.

There is room for more responsibility being given to individual institutions so that they can find ways of saving money by putting services out to tender," he said.

There is only small-scale privatization at present in higher education but there are signs of change. Liverpool City Council has urged the governors of the polytechnic and City of Liverpool College of Higher Education to discuss reducing cleaning costs with the unions and get tenders from contract cleaners on a long-term basis if the talks prove unsuccessful.

Financial difficulties had also been caused by the fall in value of the student grant, and he criticized the university's refusal to accept a reciprocal agreement with college students in Dundee who could bring money into the union.

Development in Engineering Training and the Youth Training Scheme, EITB Information Papers 67 and 68.

HIGHER EDUCATION

That was the year that was

On December 31, 1982, *The Times* published a special review of 1982 as it appeared to the tertiary sector of education. In separate articles there were examinations of policy, universities, the public sector, unions, teachers training and the National Union of Students. Developments in science, social science, adult education and the problems of the young were also featured. Special reports on higher education in Scotland and Northern Ireland were included, and in the International section, North America, France, South Africa, West Germany and Poland. There was a sample of the year's features encompassing Sir Peter Parker on pursuit to Dr Roy Porter's analysis of the impact of fashion on the sciences.

The eight-page review has now been reprinted and is available to readers at a cost of 60p each (including postage) from the address below.

Please send your order/cheque order (no cash orders) made payable to Times Newspapers Limited.

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For more information on the year in education, see the special supplement to *The Times* on January 1, 1983.

'UGC will give way to direct control'

by Sandra Hempel

The University Grants Committee will be abolished in favour of direct ministerial control of university student quotas and budgets, an economist at University College, Cardiff, has predicted.

Dr Graham Hallett, senior lecturer at UCC, says the universities should respond by giving up all hope of autonomy but insisting on guaranteed academic freedom. Direct control from Whitehall would be tolerable if the institutions were able to resist the threat to academic freedom, perhaps by emulating the American system where tenure meant a job for life but was granted only to "outstanding" scholars.

"The best tactic for university representatives might be that while reserving our position on its morality, we will accept rape if it is in a reasonably civilized manner."

Writing in UCC's latest newsletter, Dr Hallett condemns what he calls the mutedness and ineffectiveness of the protests from the Committee of Vice Chancellors and Principals about university cuts. Dr Hallett calls for more radical thinking and suggests a decentralized market-oriented system of higher education.

He advocates a tax-related loan system combined with grants. Such a system combined with the removal of quotas and the granting of the right to individual universities to set their own fees could provide an escape from the "ill-considered dirigisme" into which the Conservative Government had drifted.

"The main advantage of the loan system is that it might make it possible to find our way back to a situation in which the size of universities or subjects within universities would depend on their success in attracting students and donations rather than on the deliberations of a small group of politicians or establishment academics."

Think big, art colleges are told

by Felicity Jones

The National Advisory Body, which is planning for the future of public sector higher education, is likely to look most favourably on art and design departments in colleges and polytechnics which are above a minimum size and have larger classes of students.

Dr Patrick Nuttgens, chairman of the NAB art and design working group, made these comments about future criteria for the working group submitted its recommendations.

He said there was no doubt about the demand for places in art and design and was convinced of the need to maintain something close to the present provision since the arts subjects were so intimately linked with the economic future of the country.

The interdependence of art and design meant that the unity of these two subjects should be maintained and the relevance to other related areas such as architecture, business management and production engineering had to be kept in mind.

Dr Nuttgens said that the over-provision of staff in the art and design field could not be defended, and the "lavish" 1:4 staff-student ratio of the 1960s was no longer feasible. A ratio of 1:8 as recommended in the public expenditure white paper was most cost-effective.

But Dr Nuttgens dismissed suggestions that this would involve art colleges and departments in a larger than 10 per cent cut.

The working group is likely to fix a minimum size which will provide for "centres of excellence", below which the viability of certain departments will be open to doubt.

Applications to art colleges and departments increased by at least 75 per cent this year, according to the Association of Art Institutions in Hereford which acts as the clearing house for art and design.

Personality clash stops talks

by David Jobbins

Discussions over a call for early retirements among academic staff at Leicester Polytechnic are blocked because of a disagreement between its director and a regional official of the college lecturers' union.

It stems from a letter from Mr David Bethel, the polytechnic director and a former chairman of the Committee of Directors of Polytechnics to 50 academics eligible for premature retirement compensation appealing to them to apply to leave from the end of the current academic year.

He wrote: "In doing so you would be assisting the polytechnic and may well find PRC is not without its attractions. I do not wish to speculate on the alternative and to do so might be thought to be placing you under pressure to come to a decision."

When the letter was passed to the regional officer of the National Association of Teachers in Further and Higher Education, Mr William Hillbourne, he replied: "I find it reprehensible that you have chosen to canvass staff in this manner without first discussing it with the Nafhe coordinating committee (at the polytechnic)."

When Mr Hillbourne, acting on standing instructions from his union, accompanied the liaison committee when it met Mr Bethel, he was invited to apologize for his letter. When he refused to do so, Mr Bethel said he was not prepared to have him in his office, and the entire Nafhe contingent withdrew.

Since then no talks have taken place. Mr Bethel, a member of Nafhe, commented: "The regional officer wrote me a letter which was rude and based on ignorance. I am not prepared to deal with people who are rude. His letter was based on ignorance because the Nafhe branch has been fully apprised of the situation."

Mr Bethel made clear his objection was to Mr Hillbourne and he would be prepared to continue discussions with a Nafhe headquarter official present. Meanwhile Mr Hillbourne has taken the matter to Mr Andrew Fairbairn, Leicestershire's chief education officer.

"I am not prepared to apologize or retract one word," he said this week. Mr Melvyn Pack, secretary to the Nafhe liaison committee at Leicester, said they were appalled at the way the issue had been handled. "The attempt to impose decisions from above without negotiation is reminiscent of the autocratic tactics employed by Sir Michael Edwards at British Leyland," he said.

Leicester is one of the polytechnics where the rival Association of Polytechnic Teachers has been granted negotiating rights - and Mr Bethel said the majority of people whom he had written about were not Nafhe members.



Students from Bristol Polytechnic on their way to victory in the tenth inter-polytechnic business game. Trent Polytechnic. The 11 teams, including one from Toulouse which finished third, fed their plans for a hypothetical machine tool manufacturing company into the Trent computer for expert assessment.

Distance degree at Strathclyde

by Olga Wojtas

Strathclyde University is to offer a Master of Business Administration degree by distance learning next session, the only one of its kind in Scotland.

The degree will be taught through specially prepared teaching packs, including audio-visual cassettes, self-assessment questions, textbooks and correspondence with tutors.

There will also be an annual summer school, and several weekend schools. Professor Michael Baker, Dean of Strathclyde Business School, which is offering the degree, said: "This opens up new opportunities for managers and others who are denied normal access to higher management education. The course is a flexible enough to meet a variety of personal and professional needs and it requires the minimum absence from work."

Students will be able to study individual subjects without registering for the full degree course, and can pay for classes as they take them.

Journalism professor planned

The City University is expected to agree to appoint a professor of journalism at its next senate meeting.

The proposal, made by an internal working party, has already been accepted by the Academic Policy Committee whose members include Dr Raoul Franklin, the vice-chancellor, all the heads of department, and union representatives.

The university has run a post-graduate diploma in journalism since 1976. It recently added a diploma in radio, journalism, and international journalism - all one-year courses. It also runs a one-term certificate in periodical journalism and there are proposals to introduce a course in television journalism.

Demand for places far outstrips the number available. In 1981 there were 502 applicants for the 25 places. But the need to make economies in the university and problems within the course led the university to set up a working party to examine its future.

The working party considered three options: the most radical being the closure of the department, and

an end to the teaching of journalism. The second option was to continue the course as it had been going up to the third that the course be moved to the status of being a department in its own right, with a professor as director, and with proper funding.

One major problem found in dogging the course had been the differences between members of staff. This began as differences of opinion, but deteriorated into animosity, the report says.

The working party added that the school could not be allowed to continue as at present. The decision was taken that the department would not change without "the introduction of a significant element in the situation."

The working party favoured a third option. There should be an appointment of a director of journalism studies at professional level of person "with significant status in the profession, and his colleagues. The new department is also required for £30,000 re-equipment."

Call for ILEA to fund child care in polys

Official of the Inner London Education Authority have been asked to look into the possibility of funding full-time child care in the polytechnics.

Ruth Goe, the ILEA council member responsible for the under-16s, explained that this is in response to representations from students and members of teaching staff who have complained from

the block grant funding for polytechnics is not allowed to be spent on the provision of creche or nursery facilities. The situation is complicated by the clash of responsibilities between the Department of Health and Social Security, the Department of Education and Science, and the Department of the Environment. The teacher in the nursery may place the burden of the nursery on the authority, but may not actually fund the nursery. It may

A further difficulty arises from the Burgham Committee agreement to teachers' pay. ILEA considers it to be an equal opportunity to play, and this tends to imply the provision of some form of child care. The Burgham agreement, however, forbids remuneration in the form of benefits as opposed to wages. The time being the authority is only able to provide subsidised

Backing for physics revamp

by Sandra Hempel

A University of London working party has backed an earlier plan to reorganize physics into five departments and reduce staff/student ratios.

But the announcement last week of the University Grants Committee's decision to give London another 305 science students for 1983/84 means that the working party's forecasts on student numbers may have to be revised. The extra student numbers are unlikely to affect the main thrust of the report.

The new departments will be at University College/Birkbeck; King's/Queen Elizabeth; Queen Mary College and Royal Holloway/Bedford. The physics department at Imperial remains unchanged while those at Chelsea and Westfield are to move.

The working party, chaired by Sir Sam Edwards, Professor of Physics at Calus College, Cambridge, and consisting of principals and heads of departments from the 10 colleges involved, was set up to advise on preserving academic excellence in the face of the series of institutional mergers currently being worked out.

It concludes that the physics plan, first put forward by an inter-collegiate committee, is "both possible and desirable and should not present the university with major difficulties".

The working party identified a staffing problem, however. While heads of schools were said to want to keep a good student/staff ratio for physics, their overall budgets suggested that a 10:1 ratio was inevitable for most. The difficulty of very expensive and labour intensive projects that put a strain on staffing needed resolving "at a higher level".

The average ratio of 8.5:1 was a considerable deterioration from the 1979/80 figures of 7.4:1.

"Although these ratios are necessary for short term financial expediency, they are not in the long term interest of the subject", the report says.

A delegation of the principal, two vice principals and the finance officer met the UGC last week to appeal against the decision, but the matter is not expected to be dealt with before May.

A report in the university's Newsletter says the full cost of premature retirements with re-engagement between 1982 and 1985 will be almost £900,000. The university claimed £657,000 from the UGC, but on the understanding that only 75 per cent of such claims would be met expected at £490,000.

"The university has now been informed that it can only expect £55,000 per year as only re-engagements which will terminate in 1985 will be funded by the UGC," says the report.

"An appeal against this decision has been made on the grounds that the university has followed UGC guidelines without deviation and is now being penalised for obeying."

Dr Ron Emanuel of the university's Association of University Teachers said most of Glasgow's re-engagement contracts ran from 1984 to 1987 and would not be eligible for UGC money.

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Glasgow claim cut by £500,000

by Olga Wojtas

Scottish Correspondent

Glasgow University is to receive almost £500,000 less than its claim to the University Grants Committee for re-engaging staff who have taken early retirement.

A delegation of the principal, two vice principals and the finance officer met the UGC last week to appeal against the decision, but the matter is not expected to be dealt with before May.

A report in the university's Newsletter says the full cost of premature retirements with re-engagement between 1982 and 1985 will be almost £900,000. The university claimed £657,000 from the UGC, but on the understanding that only 75 per cent of such claims would be met expected at £490,000.

"The university has now been informed that it can only expect £55,000 per year as only re-engagements which will terminate in 1985 will be funded by the UGC," says the report.

"An appeal against this decision has been made on the grounds that the university has followed UGC guidelines without deviation and is now being penalised for obeying."

Dr Ron Emanuel of the university's Association of University Teachers said most of Glasgow's re-engagement contracts ran from 1984 to 1987 and would not be eligible for UGC money.



Oxford Polytechnic's buildings research team make a site visit as part of a project on the design and location of small factory units. The team, (left to right) Mrs Val Bacon, Dr Rolan Newman and Mr Michael Jenks, have now won a £31,000 grant from the Leverhulme Trust to study the effects of conservation policies on the conversion and re-use of redundant buildings by small firms.

Careers advisors have little time left for guidance

by Felicity Jones

The work of London's careers service has been distorted by the high level of young unemployed so as to almost exclude educational and vocational guidance.

This was the conclusion of the Inner London Education Authority education officer's report to the authority's further and higher education sub-committee. The workload of careers advisers at colleges of further education had increased significantly with a growing demand from students for vocational guidance and group work.

Students over 18 have had particular difficulty finding work. At Paddington College a 100 per cent increase in requests for information was reported.

In the polytechnics, "heavy and increasing unemployment was the major factor determining the shape and scope of work", said the report. All students had extreme difficulty finding suitable work.

More than 1,800 graduates and diploma holders from the five polytechnics were registered as seeking permanent employment. In previous years only certain disciplines were affected, but last year, practically all courses carried casualties although it was still most marked in arts and humanities.

On the other hand, demand from companies for new graduates showed

a substantial decrease. The annual "milk round" of companies was reduced from 85 to 65 companies and the case of a first class honours graduate who made 44 applications for one job offer was typical.

Students continued to make heavy use of career centres. The appointment of an unemployment specialist has been reported successful in finding non-traditional job opportunities and running one or two day workshops.

The dilemma has been whether to channel resources to present students to try to prevent unemployment or towards out-of-work past students. Both courses are being followed but this is stretching the resources of the careers service.

In London as a whole there are 17 young people chasing one job compared to four in 1980. The report said that despite the declining credibility of the Youth Opportunities Programme, nearly 27 per cent of those who left the programme in the last four months found a proper job and a further 13 per cent were motivated to continue in education or training.

But there was also a strong indication of growing disillusion, as out of the 40 per cent who went back on to the unemployed list a fifth did not bother to respond to repeated inquiries from careers officers.

Bridging the coffee gap

The often-neglected partners of mature and postgraduate students have been offered a social lifeline at Sheffield University.

Student counsellor Mrs Mary Sharrock is organizing coffee and sympathy sessions for couples with one partner outside the university sector in an effort to bridge what can develop into a damaging gulf.

While Mrs Sharrock says that there is no evidence that academic work suffers, there is a tendency either for students to miss out on the social and cultural advantages of university life or for their partner to be excluded.

And she believes the events organized by the students' union do not attract older couples, largely because of the age gap.

"Adjusting to university life is quite a difficult thing, especially for a man in the process of changing his career or a woman after having had her children. If for example a wife is unhappy and feels excluded, this will rebound on the children."

"This is not a social problem, but a family problem. If one of the partners is involved in an activity which is exclusive of the family, this will be destructive of closeness."

Mrs Sharrock's solution, thought to be unique in British universities, is to provide the opportunity for couples to meet others in the same circumstances and build a social life which crosses the divide between university and the outside world.

Union leaders aim to monitor YTS closely

by David Jobbins

Trade union leaders are anxious to preserve the new Youth Training Scheme from the abuses which led to widespread criticism of the Youth Opportunities Programme.

Faced with claims from the extreme left within the trade union movement that the YTS is a vehicle for cheap labour, they believe that the only practical antidote is close monitoring of the scheme.

Mr Ken Graham, assistant general secretary of the TUC, told last week's TUC youth conference: "YTS will come into operation and we have got to get involved. The scheme is completely consistent with TUC policy on training for all, but we have to ensure that something which is consistent when it is written down is consistent in practice. How do we do this? By saying we will not get involved."

TUC involvement ensured that schemes were good and helpful to young people, he said.

Mr Graham and other TUC leaders faced severe criticism over their acceptance of the scheme mainly from delegates who are members of the Militant Tendency-dominated Labour Party Young Socialists. Behind their rhetoric were fears based on experience of YOP that employers would substitute trainees for redundant employees.

Mr Graham pointed to the clause included in the scheme designed to ensure that recruits are in addition to a firm's normal trainee recruitment.

Another safeguard on which TUC leaders are pinning their hopes is to ensure as many schemes as possible are in workplaces with strong union

organization.

"The more that schemes are established within the unionized sector, the greater our ability to ensure these young people are not treated as cheap labour. And if we can recruit them into the trade union movement the greater our ability to keep contact with them after their time on YTS, whether employed or unemployed," Mr Graham said.

The TUC is supporting the Jobs for Youth Campaign which is seeking an increase from £25 to £30 in the weekly allowance to trainees. On top unions will be able to negotiate with employers for a further £4.49 topping up without jeopardizing exemption from tax and National Insurance contributions.

Leaders of the college lecturers' union this weekend expressed "grave concern" at reports that the Manpower Services Commission was on the point of announcing a restriction of 13 weeks on the educational component of YTS.

The February council of the National Association of Teachers in Further and Higher Education warned that the move, apparently being considered because the MSC has insufficient funds for the longer courses which many college authorities had anticipated, was putting financial and numerical considerations above the needs of students.

Nafhe is to monitor agreements locally to ensure they include a sound educational and training component.

"We are also concerned schemes are reputable and that work experience is in a properly organized workplace," a spokeswoman said.

IRAS turns day into night

Astronomers will soon have a complete, new star catalogue for research and reference. The InfraRed Astronomical Satellite, launched from California last month, is working perfectly and has begun to survey the sky at wavelengths unseen by earthbound observers.

Scientists who presented the results of the satellite's first scans this week were delighted with IRAS performance so far. Speaking at the ground control centre - the Science and Engineering Research Council's Rutherford-Appleton Laboratory in Oxfordshire - Dr Frank Gillies of the Kitt Peak National Observatory in the US, said: "Observing in the infra-red region from Earth was like trying to see optical astronomy in daylight. IRAS made the difference between night and day."

The satellite, built and launched at a cost of around £100m, is the culmination of seven years work by 100 scientists in Britain, Holland and the United States, the three countries which support the project. Its main load is an infra-red telescope with detectors covering the spectrum from just outside the visible to the radio-wave regions.

Over 4,000 infra-red sources were seen the first day the telescope cover was removed, almost as many as the total previously known. The life of the mission is limited by loss of the liquid helium which cools the telescope and this is boiling off slower than expected. The project team now expect scans to go on for 300 days.

He said he was proud of the British involvement in the satellite, and progress to date helped justify the Government's decision to increase the SERC's budget last year. The survey was "a first-class example of what can be achieved by international co-operation", he said.

Honda backs Imperial's aerodynamics

Honda, the Japanese car manufacturer, is to back a research programme on vehicle aerodynamics in the Department of Aeronautics at Imperial College, London.

A tunnel is to be constructed with Honda's help which will capitalize upon experience gained in testing vehicle configurations in the department's Donald Campbell Laboratory, where the late Donald Campbell used to test his record-breaking boats and cars.

The laboratory is now used by many British and foreign car firms, among them BL (who produce cars in cooperation with Honda), Lotus, Williams and Ferrari.

Department head Dr Glynn Davies said: "We are glad that Honda recognizes the importance of aerodynamics in the future economic and safety of the motor car."

The backing, he said, was a "vote of confidence" in the department.

Aston University, too, has secured a new Japanese link, giving management studies undergraduates first-hand experience of working in industry through an arrangement with Yokohama's Kanagawa University.

The scheme, which has been set up by Dr Robert Akroyd, will involve the undergraduates in an intensive three-month Japanese language course, followed by a full year with a Japanese company.

The first students for the scheme will be selected this spring and go to Japan in the summer.

Dr Akroyd of Aston's management centre, has just returned from a year in Japan as a Japan Foundation Fellow.

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Entry to Chinatown is barred

from a Special Correspondent

Angry neighbours of the Tufts University Medical Plaza in Boston have scored a partial victory in their campaign to stop the university building an eight-story health sciences library on a 12-acre site in the city's Chinatown district.

The Boston Redevelopment Authority is recommending that permission to build be denied. The zoning board of appeals, which short of litigation has the final say on the matter, earlier this month accepted the authority's opinion, but following a protest from university lawyers and a personal comment from Tufts president Jean Mayer, the administrative committee has suspended a decision for 90 days.

In 18 years of university expansion, the redevelopment authority's recommendation is the first time the city has rejected a Tufts agenda item. The university campus is located in a suburb of Boston while its dental and medical facilities are situated in the city's dwindling Chinatown section.

The proposed library, says one representative of the community's cultural concerns, "means inevitably more competition for less space in Chinatown".

Chinatown residents see the 90-day delay as both a partial victory for them and a second chance for Tufts. A vice president for Tufts dismissed the redevelopment authority's criticisms of the library blueprints as "off-the-wall". The director of the city agency called the plans "an alien design, incompatible with the character of the street".

Although a relatively small segment of Boston's growing multi-ethnic communities, Chinatown has been experiencing a resurgence in its cultural presence and impact, say residents. A huge, ornate gate, adorned with dragons and other Asian symbols, welcomes visitors as a gift from the Republic of Taiwan. The new and largely expanded Asian wing at the Boston Museum of Fine Arts has also helped to generate new interests in the city's Chinese community.

Some speculate that public opinion may side with Chinatown because the controversy is being discussed under the light of the New Moon celebration, the Chinese new year.

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The transition from high school (above) to university (below) can be hard. Now steps are being taken to soften the blow.



Bridging the high school gap

from Peter David

WASHINGTON

American universities, after neglecting the needs of the high schools during the 1960s, have begun to enter a growing number of collaborative arrangements with schools, according to a new report published by the Carnegie Foundation for the Advancement of Teaching.

The report, released last week to coincide with a major conference at Yale University attended by both university presidents and school superintendents, documents a large number of schemes in which secondary schools and higher education have cooperated to raise standards and ease the transition between school and college.

Mr Gene Maceroff, the report's author, says one reason for the change of mood may have been the "shock treatment of remediation" - as more and more colleges have found it necessary to make up for defects in high-school courses. Whatever the reason, the relationship between the two levels of education has begun to change.

The report continues: "Representatives of higher education and the public schools are taking notice of each other, with and without the prodding of legislators. Discussion of mutual problems has begun and there is tacit acknowledgment that it is time to overcome the distrust that has proved so obdurate a barrier to cooperation."

A number of collaborative schemes are singled out for special comment in the report. One, Syracuse University's "project advance", permits high-school pupils to earn college credits without leaving their school classrooms.

Seventy-five schools in four states participate in the programme, which uses the same material and the same tests as first-year students at the university. The school itself decides which students can enter the

programme, with Syracuse requiring only that participants complete the normal school curriculum in addition to taking the project advance courses.

Operating on a more limited scale, Kenyon College in Ohio has a school-college articulation programme through which six private schools are able to offer courses that lead to college credits. Kenyon, like Syracuse, awards its credits to students who successfully complete the courses in high school, and a Kenyon transcript is sent to whichever college the student eventually attends.

The report praises the "extraordinary" efforts of Johns Hopkins University in teaching out to gifted pupils still in school. A programme for mathematically precocious youth has been followed by a programme for verbally gifted youth.

In both cases, gifted children in the seventh grade are identified through the scholastic aptitude test and given every opportunity to accelerate their school studies, in some cases entering university at 15 or 16.

Pupils on the scheme who remain in high school, as most do, are able to participate in a Saturday programme at Johns Hopkins or at satellite centres established around the country. Some youngsters and their parents travel two or three hours each way for the Saturday courses.

The Hopkins model has been picked up by several institutions, including Duke University, Northwestern University and Arizona State University, so that 13-year-olds in other parts of the United States are able to move through the school curriculum at a pace better suited to their special abilities.

Another form of university/school collaboration highlighted in the Carnegie report is a new effort by many universities to improve the quality of applicants for teacher training. Last year a consortium of eight universi-

ties spearheaded by Pennsylvania State imposed new and stringent admissions tests on applicants intending to go on to teach.

In a different initiative, the University of North Carolina at Chapel Hill has launched a fresh attempt to lure better qualified candidates to elementary and secondary school teaching by reviving the master of arts in teaching, a scheme set up in the early 1960s but since fallen into disuse.

Almost all the students chosen to initiate the programme last year had majored as undergraduates in the biological or physical sciences, mathematics or English. They have undertaken to become secondary school teachers in those subjects and each has been given a \$6,000 stipend plus a tuition fee waiver.

Once they get their master's degrees, the new teachers must work for at least three years in the schools of North Carolina or Tennessee, preferably in the rural areas.

Commenting on the report, Mr Ernest Boyer, the foundation's president, pointed out that nearly one out of every two American high-school graduates went directly on to higher education and a closer relationship between the two sectors was urgently needed.

But he warned that few of the schemes had been properly evaluated and that the power of tradition remained a strong obstacle to closer relationships.

Too often, the last year seems like it ought not to count. It is a time when students in high school feel they are no longer part of one world and have not yet passed into the next world," he said.

"Surely, schools and colleges could create a more satisfactory transition period that blends the two levels in a way that carries the student forward more smoothly and enhances, and does not detract from, the purposes of education."

OU moves its American headquarters

by our North American editor

The North American centre for Britain's Open University has moved from New York to the headquarters of the American National University Consortium in Maryland. The NUC promotes distance learning to help older students take first degrees.

The Open University foundation was established in New York in 1974 in the hope that it would be able to co-produce courses with American universities. Dr Michael Neil, executive director of the New York office, admitted last month that the results had been disappointing.

But he added: "Our experience has shown that the most likely mode of cooperation have been the adaptation of Open University courses and the exchange of information and personnel."

"The NUC has been the most successful in this regard and its member colleges are the biggest users of our materials. Housing our North American centre near the NUC seems to be a logical step."

Dr Neil will not, however, remain in the United States and is returning to the Open University foundation at Walton Hall. The Maryland centre will be staffed by an information officer and maintain Open University catalogues and resource materials.

The Open University's involvement in the United States began in 1972 under the auspices of the College Board and the Educational Testing Service in a programme financed by the Carnegie Corporation. Open University courses were tested at three colleges - the University of Maryland, Houston and Rutgers.

Bribes professor ousted from job

A professor at the University of Maryland has pleaded guilty to charges of organizing a bizarre system of bribery in which he hired three graduate assistants and pocketed half of their stipends. In return, two of the assistants were required to do no work and one received high grades for courses he never attended.

The professor, Mr Al-Tony Gilmore, former director of Afro-American studies at the university's College Park campus, was charged after state police staged an elaborate "sting" operation. One of the graduate assistants lured the professor to a meeting near a parked van to discuss the scheme, while a detective hid in the van under a blanket.

In court Mr Gilmore admitted that he received about \$12,000 from the three assistants over a period of more than three years. His own salary was \$41,000. Although the professor has lost his job as director of the department, he has not yet been fired by the university.

Overseas news

Peace project to embrace East, West and Third World

by Thomas Land

Several big universities are expected to collaborate in a global peace research programme to be launched this year by the United Nations.

It is to break new ground by concentrating on the causes of strife and violence in international relations instead of pursuing conventional studies in the framework of disarmament and arms control. The peace research programme is to be coordinated by the United Nations University (UNU) under the guidance of Dr Rajni Kohari, director of the Centre for Research on Developing Societies in Delhi. The universities collaborating in the project are likely to include some from both East and West as well as the South, where the arms race has recently intensified.

The programme - coinciding with the European strategic negotiations in Geneva - will analyse an industry which employs a fifth of the global workforce of qualified scientists and engineers in military activities, consuming a quarter of all investment

devoted to research and development.

The project follows the publication last year of a UN study prepared by a group of government specialists which analyses the relationship between disarmament and development. It called for more disarmament-related public information, education and research activities.

Dr Kohari, a sociologist, recently discussed disarmament and peace research during a workshop of academics, parliamentarians and others at Hiroshima University.

He considered that the concept of peace research based on the assumption that general disarmament would be achieved through a gradual, phased reduction of weapons should be reviewed. He thought that research workers must rid themselves of the "absurd cobwebs" preventing

them from thinking about ways of putting an immediate end to the arms race. It was a "myth" that countries can prepare for war in the interest of maintaining peace.

The UNU programme will address five principal issues of "peace and global transformation". These are: conflicts over natural resources (defined to include radio bands and satellite orbits); the global economic crisis; the role of the state and inter-governmental agencies; the problems of vulnerability, violence, human rights, basic needs and cultural identity; and the process of militarization.

Since each of these problem areas already receives specialist attention at various institutions, the UNU programme will seek to focus on the links between them and to identify the scope for action at various levels.

The entire programme is planned to be action-oriented, "in the hope," explains UNU, "that it would make a genuine contribution to the knowledge required by the campaign for peace".

That is in line with the official policy of most governments as expressed at the UN's special disarmament sessions - although governments tend to speak a different language when addressing their own peace demonstrators at home.

Thus the study of government specialists on military expenditure urges the UN to create a meaningful global "disarmament-developed perspective", exposing the disastrous effect of national policies. The study put the world's military expenditure in 1980 at nearly \$500 billion, including the \$26 billion international arms trade. This compares with \$300m invested by the World Health Organization - not quite the price of a modern strategic bomber - in a 10-year programme to eradicate smallpox worldwide.

Germans face student bulge

from James Hutchinson

BONN

West Germany's university vice chancellors have called for the recruitment of more teachers to cope with a projected massive increase of students in the 1980s. They say that more money must also be spent on university building and research.

According to the Association of Vice Chancellors, the student population will rise by 30 per cent to 1.5 million by 1989, after which it will slowly fall to about 1.1 million by 1995, its present level.

The federal government, preaching the need for thrift, considers that the universities should cope with the student bulge within their "normal" budgets. The universities say this will not be possible without an extension of the *numerus clausus*, the list of subjects for which there are enrolment limitations.

They point out that educational policy is still aimed at providing a university education for all suitable applicants. "We support this aim," say the vice chancellors, "because there is no adequate alternative to university education."

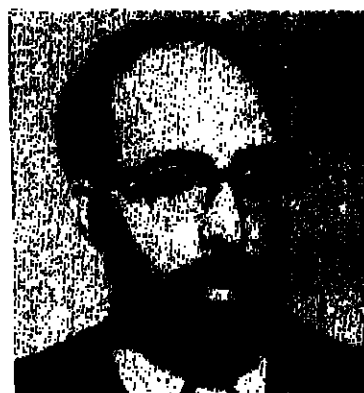
Turkish junta's not for bearding

Professor Selçuk Erez, chairman of the Istanbul Turco-British Association, has been suspended from his post as Professor of Obstetrics and Gynaecology at Cerrahpaşa School of Medicine at the University of Istanbul because he refused to shave his beard. Turkish academics were warned earlier in the teaching year that they could not keep both their beards and their university positions.

Some of them shaved, a few who had been clean-shaven before grew beards, but some, like Dr Erez, continued to meet their classes hirsut. Now, in what appears to be a test case, the Court of Decency has summoned him to appear, and will, no doubt, order him to shave.

This court has also ordered students to attend classes dressed in ties and jackets. In Ankara the student organizations are said to have accepted this - but to be on strike until the Government gives them grants which will buy the new clothing.

This emphasis on decency may seem familiar to those who know the Middle East and Islam, but is an unexpected development in Turkey, where the ruling military government seems to be as fearful of extreme



Professor Erez and his subversive beard

suspected that he was asked to go: Yalcin Kueuk was sentenced to eight years in jail for his book, *For a New Republic*, which the court held was Marxist.

Two research directors from Ankara's Middle East Technical University are in Britain for a tour financed by the British Council which has upset some Turkish academics. Professors Kenal Guruz and Yahya Tezel are to spend two weeks investigating the possibilities of cooperation between British and Turkish universities.

The institute staff, however, refused, saying that they could only do so on the orders of judicial and police authorities.

With no practical means of redress at its disposal, the academic senate of the academy expressed its moral indignation by passing a formal resolution of protest against the police and authorities and formally congratulated the rector for his defence of the students.

Because of the firm stand taken by the Krakow academic community, few attempts have been made to recruit university lecturers into the new trade union structure. Instead, members of the former Polish Teachers' Union (which, like Solidarity, was dissolved in October 8, 1981) in the Krakow area are being automatically listed as members of the new unions.

Fraser tough on tenure

from Geoff Maslen

MELBOURNE

Significant changes to the staffing structure of Australian universities, including the number of tenured academics, are to be made by the government of Mr Malcolm Fraser if it is returned to office after the election on March 5. According to documents leaked to the press, the Fraser Cabinet decided last month to change long-standing tenure procedures in higher education institutions by reducing the number of tenured staff to 80 per cent of the total full-time staff at the level of lecturer and above in universities and lecturer level two and above in colleges of advanced education.

The federal government had decided that it would make funding of tertiary institutions conditional on establishing these ratios of tenured to non-tenured staff. The new system would be phased in over several years. Details of the changes were to have been announced by the minister for education, Senator Peter Baume, when Parliament resumed at the end of February. But the decision by the Prime Minister to call a snap election will now delay the tenure decision and gives the various groups involved an unexpected chance to lobby both parties on the issue.

Last year, an all-party Senate standing committee on education and the arts carried out an inquiry into academic tenure and recommended that the percentage of tenured academics should be limited to 90 per cent of the academic staff of universities and colleges of advanced education. However, the Tertiary Education Commission, in a private memorandum to the minister, recommended an 80 per cent limit to the proportion of tenured staff in each institution. The Senate committee said: "When the federal Cabinet discussed the issue it decided that a lower level than 90 per cent was more desirable from the point of view of both staff and financial flexibility."

Critics of the rise in the number of non-tenured and contract staff in higher education over the past five years claim the staffing problems in higher education flow from the government's financial restrictions and not from the tenure system itself. The Labour Party has not yet indicated whether it would alter the proportions of tenured versus non-tenured staff if elected to government but the then opposition spokesman on education welcomed the Senate committee's report when it was tabled last year.

Mexican staff make do with 25% increase

from Emil Zubryn

MEXICO CITY

Academic staff at the National Autonomous University of Mexico (UNAM) have accepted a 25 per cent salary increase and rejected calls for a walk-out in protest of their original claim of between 50 and 60 per cent. The award, which also includes a 4.9 per cent increase in fringe benefits, will cost the university an extra 4.5 billion pesos (\$20m) per year.

Rodolfo Coeto Mota, a UNAM administrator, hoped that the government would not see the wage increase as a reason to reduce its funding of teaching and research at the university. Research projects are currently financed by around 17 per cent of the total budget.

Raúl Belar Navarro, UNAM secretary general, revealed that the budget for this year will be between 35 and 40 billion pesos (\$154-\$176m). This represents a 60 per cent increase on last year. Some 14 billion pesos (\$62m) of the new budget will go on the wages of academic staff.

The acceptance of the 25 per cent increase by the Autonomous Association of UNAM Academic Personnel, which represents some 33,000 teachers, owed much to the personal intervention of Dean Sergio Reyes Lajon, who appealed to the teachers to take into account Mexico's acute economic crisis.

Vice chancellor sacked

from D. B. Udalgama

COLOMBO

On the eve of the re-opening of the University of Sri Jayawardhanapura this month, President J. R. Jayewardene, who is also minister of higher education, replaced the vice-chancellor, Professor T. B. Kanagaratne, by Mr K. Kodituwakku, a former university lecturer who was an adviser to the ministry of youth and employment.

No reason has been given for the removal of the vice-chancellor, but the university was closed prematurely at the end of last year, following a serious clash between undergraduates and local residents in which several were injured and much damage done to university property.

Three committees are at present investigating student grievances and demands at the universities of Sri Jayawardhanapura, Colombo and Peradeniya. A three-man committee, headed by a retired Supreme Court judge, is investigating the causes of a clash between pro-government students and students favouring the National Liberation Front (which organized the insurrection of 1971) after student council elections.

Undergraduates of Colombo University recently forced the vice-chancellor, Dr S. Wijesundera, to give a written assurance that an inquiry would be held into their grievances. On the previous day, they had been tear-gassed and baton-charged by the police when they marched to the vice-chancellor's office to protest against the admission of external students to the law faculty on payment of fees which, they said, negated the principle of free education. They also protested against the admission of students from the Kotelawala Defence Academy to certain courses outside the normal admission system. A committee has been appointed.

Foreigners welcome in Japan

The desire of Japanese universities to appoint foreign, and especially English-speaking academics to their staffs is continuing apace.

A British specialist in Japanese culture, Dr Peter Kornicki, has accepted an invitation to become an assistant professor at Kyoto University, where he is currently completing research into social change in nineteenth-century Japan.

Japanese universities usually favour foreign academics because they help attract promising foreign undergraduates who would otherwise be put off by the difficulty of learning Japanese.

The law faculty of Kyoto and the Teikoku University, for example, use the latest Japanese institutions considering the appointment of foreign academics. Kyoto has been staking Dr Kornicki, from Oxford University, for some time, regarding him as "an outstandingly able researcher." His duties will include supervising Japanese postgraduate students.

Harvard rapped over slack investigation of 'fraudulent' heart specialist

from E. Patrick McQuaid

CAMBRIDGE, Mass

Harvard University has received a sharp slap on the wrist for its failure to investigate properly the activities of a heart specialist suspected of falsifying data in a series of costly government-subsidized experiments. The National Institute of Health, the federal umbrella agency administering such research, has issued a decree barring Dr John R. Darsee, the former Harvard Medical School cardiologist, from receiving any government research funds for 10 years and is insisting that the university refund \$122,371 it received to study the effects of certain drugs following heart attacks in dogs.

The research was carried out at the Corcoran Research Laboratory of Brigham and the Women's Hospital, the university's Boston affiliate. It was under the direction of Dr Darsee, who was the principal investigator in an investigation into the effects of certain drugs following heart attacks in dogs.

Conducted experiments prior to his Harvard appointment in 1979. A six-month inquiry by a panel representing the National Institute of Health has suggested that Harvard contributed to the proliferation of academic fraud, especially in its decision to allow Dr Darsee's immediate supervisors to handle the initial investigation without notifying the government agency of its suspicion.

This marks the first occasion in the history of the National Institutes of Health that the ministry has enforced its authority to prohibit a scientist from receiving research subsidies or from participating in ministry-related programmes. Dr Darsee, 34, is currently with Ellis Hospital of Schenectady, New York.

Following Harvard's internal probe, labelled as "insufficiently thorough and not definitive," ministry officials Dr Daniel C. Towse, head of the medical college, appointed a special panel to investigate the heart specialist's work with Harvard. Last year his committee

determined that Dr Darsee had falsified data in three studies, but a panel reporting to the National Institutes last week concluded that at Harvard he worked on at least 12 projects.

Publicly over this and similar cases elsewhere has generated a series of university memoranda on "academic fraud" from several American institutions, and professional agencies (THES, September 24).

Last summer, Dr Darsee's supervisors - Dr Eugene Braunwald and Dr Robert Kloner - recalled selections from his published studies the cardiologist had been associated with. Suspicion of Dr Darsee's work first arose when teams from four other medical schools, working on a joint research effort, found data very similar to his. In May 1981, researchers at Harvard questioned Dr Darsee's findings on an electronic program tape but the university did not share its concerns with the National Institutes until October.

Three months later, when the four contributing universities and the ministry's National Heart, Lung, and Blood Institute simultaneously discovered the discrepancies.

Dr Darsee claimed it was an isolated instance and while acknowledging the presence of fraudulent research, excused himself of any personal blame. His colleagues kept the case an internal matter, for fear of jeopardizing his promising career.

"The supervisory practices in the laboratory reported to the National Institutes panel of inquiry," while in no way responsible for Dr Darsee's misconduct, may have contributed inadvertently to the ease with which he was able to produce falsified data and to the subsequent difficulty in documenting the extent of the problem.

The report further charges that "a hurried pace and emphasis on productivity, coupled with limited interaction with senior scientists, have contributed to the disappointing events."

Alternative Parisian chic

After the success of a trial volume that appeared last autumn, a new review of cross-disciplinary commentary named *Babylone* made its debut in Paris this month.

Published as part of the Union Générale Editions' 1018 series, the pilot issue addressed the question of post-modernism in fields ranging from politics and economics to architecture and philosophy. Its second issue, to be published in September, will focus on the theme of socialism as espoused and practised in Europe and the Soviet Union.

Divided into one section of primary scholarship and another of commentary, the review comprises 250 pages and will appear tri-annually with the continuing aid of grant from the Centre National de la Recherche Scientifique.

The editors stipulate that all contributions must be accessible to non-specialists in the field concerned and take responsibility for any translation into French.

But *Babylone* is more than the name of a review or a collection of topics. It is also the people who direct it and their response to a particular set of problematics. Economists, sociologists and professors in various fields, they seek above all to create what they call a "working place" for intellectual confrontation which is otherwise disappearing in France.

Disappearing, because in what has come to be known as "the crisis of leftist thought", a generation of dispossessed scholars and thinkers has found the arena of debate co-opted by the state. As review founder Yann Moulier explains the situation: "At a top level in France, there is no discussion of ideas. You find only the State, one agency or another, taking supremacy in a purely intra-bureaucratic debate."

In frustration, scholars and intellectuals have become increasingly specialized and uninterested or uninformed about developments beyond their respective fields. As a community of thought has evaporated, they have also abdicated responsibility for organizing the circulation of ideas.

In order to transform this so-called "crisis", *Babylone* hopes to provide an alternative outlet for researchers who are increasingly opposed to institutions of knowledge and culture such as the press and the university system itself.

At the same time, *Babylone* can be considered neither as a substitute for academic journals nor as a forum for a specific kind of writing. The first issue not only demonstrates an admirable depth and scope of subject, but the editors have shown themselves willing to break beyond the bounds of particular ideologies and opinions. While responding to a crisis of leftist thought, they still inform, for example, a piece by the arch-conservative economist Lucas and Sargent, as well as promoting the research of fledgling scholars.

In doing so, the editors make good their promise as stated in the review's introduction "to confront a Babylonian diversity of thought". Clearly the undertaking is ambitious and, like many of the Paris movements that have flourished here in recent decades, idealistic.

The Israeli intelligentsia - largely left-wing and opposed to the Begin government - has recently taken grim note of two portents; a call for legislation against contact with the Palestine Liberation Organization; and the Censorship Board's banning of a satirical play.

Foreign minister Yitzhak Shamir recently told the Knesset that there was "no avoiding" legislation to prohibit Israelis from contacting or meeting people belonging to or linked with the PLO. The cabinet has already instructed Attorney General Yitzhak Zamir to submit an opinion about amending the existing law covering contacts "with foreign agents".

These moves were sparked by a meeting last month in Tunis between PLO chairman Yasser Arafat and three leading Israeli left-wingers - Professor Madyahu Peled, a former major-general who teaches Arabic literature at Tel-Aviv University, Uri Avnery, editor of the popular weekly, *Haolam Haze* and a former Knesset member for the Sheli Party, and Ya'acov Arnon, a retired director-general of the Treasury.

Professor Zamir, the cabinet's legal adviser, last summer quashed a move to prosecute Avnery for meeting Arafat in Beirut during the siege. The attorney general's opinion then was that Avnery could not be prosecuted under existing laws.

The calls for changing the law to allow prosecution of those meeting PLO leaders are seen by many Israeli intellectuals as a serious threat to political liberty.

They link this to other recent moves and statements - such as emigrating those who oppose government policy as "traitors".

The second portent came last December (with the confrontation between the state and the management of Tel-Aviv's Neve Tzedek (oasis of justice) theatre company).

Neve Tzedek routinely applied to the censorship board - a non-governmental public committee which by law must approve all films and plays - for a permit to stage Hanoch Levin's new satire, *The Patriot*.

The board, chaired by ex-journalist Joshua Justman, objected to some passages, which attacked Israel's invasion of Lebanon, attitudes to Arab and Jewish religious establishment. The board banned the play, arguing that it affronted fundamental values of Judaism and Israel and the audience's susceptibilities. No play before this had been banned in Israel's 34-year history.

The theatre refused to obey the banning and the authorities declined to physically shut down the theatre. Neve Tzedek, to make its point, performed the play for one evening, in defiance of the censors.

Demoralization set in on the censorship board and several members resigned.

Eventually Mr Zamir, prodded by the Interior Ministry, ordered the police to press charges against Neve Tzedek's managers for staging the play in that one "illegal" performance. No date has yet been set for the trial.

The *Patriot* is now being performed with the two passages the censors found objectionable being read rather than acted.

According to the censors, one of the passages compares present Israeli treatment of Arabs with the Nazi treatment of Jews and the second passage depicts a Jew torturing an Arab. The theatre denies the censor's interpretation of the passages.

Hebrew University professor Ze'ev Sternhell said: "The struggle in Israel for freedom of expression must be and is constant, a daily affair." He is an expert on right-wing political movements in France earlier this century. With the Labour Party's electoral defeat and loss of power in 1977, he became one of the most politically committed and active academics in Israel.



Massacre victims are removed from the Sabra camp. Actions like this have been roundly condemned by intellectuals

Retreat from the political arena

Recent events in Israel make it likely that academics will return to their university pursuits, says Benny Morris



that politically motivated censorship is clearly evident, and increasing, in the state-run electronic media, and "it has become worse since Begin's reelection to a second term (in 1981)".

But fundamentally, the facts of a state of war and a military campaign in Lebanon, and bitter internal political and social conflicts had not resulted so far in serious inroads on political and intellectual freedoms.

Just days after the start of the Israeli onslaught in Lebanon Professor Peled, Hebrew University physicist Professor Daniel Amit and other leading left-wing intellectuals formed the Committee Against the War.

Most intellectuals, steered clear of the committee which, because of the extreme views of its leadership, was regarded as "partisan" and "fringe".

The committee managed to mass only some 10,000 supporters for its first - and only - rally against the Lebanese war, in Tel Aviv's central square.

The Labour Party reluctantly gave its blessing to the war at first but the continuing carnage and destruction, the obvious expansion of the war to Beirut and the massacre of Palestinians in Israeli-held West Beirut eventually pushed the bulk of the intelligentsia into open, active opposition.

"There was no treason of the clerks here," said Professor Sternhell. "There is no losing of the line, no falling into step behind the flag. We are intellectuals - led the non-conformism of the opposition. We did not betray our values."

Professor Sternhell, a member of the Labour Party executive, recalled how he and a number of other intellectuals pushed through "against the opposition of most of the party's establishment leaders" the decision to make common cause with the Peace Now movement in September 1982 and to jointly launch a "New Rally in Tel Aviv".

Some 40,000 turned out for what was the largest demonstration in Israeli history. While focusing on the massacre, the rally effectively expressed the widespread discontent with the war and Begin's policies in general.

That rally, internal coalition pressures, and a variety of appeals by a symptom of this despair.

Cholow anticipates some turmoil on the campuses in the coming months because of the implementation of the Kitzav committee report on student fees.

Moshe Katzav, a Likud Knesset member and deputy housing minister who headed the government committee, recommended that various categories of students receive substantial help from the state towards tuition.

Among the recommended categories for state subsidies - effectively a reduction of fees - are demobilized soldiers, residents of "development towns" and inhabitants of "underprivileged neighbourhoods" in cities. The subsidized categories cover only Jews.

The Arab students have charged that the report is "discriminatory". Large scale protests by Arab students and left-wing Jewish students are anticipated by the universities.

according to Professor Sternhell, "the complete silence" on Israeli university campuses since last summer.

The assistant dean of students at the Hebrew University, Aaron Chelow, believes that the quieting down of the campuses after three years of continuous student unrest is due to a number of factors, most of them non-political.

He points to the changed leadership this year of the right-wing Kastel student faction, which has dominated the student union at the HU for the past six years. "The present leaders are a new breed," says Chelow.

Last summer, the HU authorities had formulated "a very negative forecast for the present year. We expected an increase of campus political violence and increased polarization between the factions."

But it turned out differently. The war failed to become a campus issue. Chelow suggests that the increased reserve duty for Jewish students because of the war - in some cases up to 90 days in uniform during the past eight months - served to cool political ardour.

A steep rise this year in tuition fees from around £150 to £350 may also have accounted for the greater devotion to studies.

According to the summer forecast by the university authorities, the HU's 600 Arab students (out of a total student body of some 15,000) were expected to rocket into political activism in reaction to the IDP's onslaught on the PLO.

"But the opposite occurred. The destruction of the PLO forces in Southern Lebanon, and the apparent inaction or indifference of the 'brother' Arab states to the Palestinians' plight, sent Israeli Arab students into shock. The war stunned and bewildered them."

And when the initial reaction wore off, says Chelow, the Arab students slowly began shifting their political sympathies from the radical Arab Bloc which is aligned with the PLO and the Rejection Front state to Rakah, the Israeli Communist Party, which is more moderate.

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On the other hand, the union university confrontation at the HU simmered down over the past few months, with the acceptance by the official student union of an arbitration formula and agreement by all sides to hold new student union elections in May. The university has once again "recognized" the official union, and the "alternative" (left-wing) union set last summer has agreed to disband.

Despite the dominance of the large HU and Tel Aviv University campuses by right-wing student groups, Israel's universities continue to be regarded by the Likud-dominated government as bastions of opposition thinking.

But the Begin government has carefully avoided directly attacking the universities' university heads of university budgets in a manner which could reasonably be seen as politically motivated.

Budget cuts, while severe in certain spheres have been no more radical than in government departments.

Professor Sternhell charges that the school curriculum set by the state, has become increasingly provincial and narrow, concentrating on Jewish and Zionist content. He says the curriculum fails to open the youngsters' minds to the "wide world beyond Israel and its problems".

Science's quality control

Two researchers argue that the peer review system cannot cope with present funding restraints. Jon Turney reports

Factory workers produce goods, farmers produce food and scientists produce... well, research. Measuring the quality and, trickier still, the quality of this last output is a contentious business - traditionally passed to groups of fellow scientists whose collective opinion feeds into evaluations based on peer review.

But funding bodies like Britain's research councils adopted peer review as a decision aid when science was cheap, research teams were small and budgets were rising. Can the same system cope with the demands of restructuring patterns of funding to meet new scientific and industrial needs when money is tight and "big science" dominates basic research spending? Two researchers at the Science Policy Research Unit at Sussex University, John Irvine and Ben Martin, argue strongly that it cannot. And the first fruits of their efforts to devise other ways of assessing research performance are now being published.

Big science is a term coined by science watchers to describe the growth of very large research institutes after the war. It takes in astronomy and space projects but the most famous examples - the cathedrals of high technology - are the accelerators built to study subatomic particles. The study of the unimaginably small is big science in every way: it uses huge machines, consumes vast amounts of energy and costs millions.

Big is also the word for the research groups involved. The European Organization for Nuclear Research (CERN) in Geneva, for example, employs 3,500 staff and has another 2,000 fellows and scientific associates. Its most significant recent experiment, designed to detect the elusive "W" particle, involved 17 physicists from all over Europe. This creates problems on top of those faced in ensuring a battalion of scientists all march in step. In a discipline dominated by three or four very large research instruments, where can you turn for the objective scientific opinion on which peer review depends?

As Martin and Irvine point out, anyone who knows the field well enough to have an informed opinion will generally have a direct interest in individual decisions about new money. This can lead to disparaging a rival centre to enhance one's own chances of increased funding. Or a few centres may agree among themselves to support each other's bids to give the appearance of consensus about goals and priorities. Either way, neutral, disinterested peer review is lost.

This is only one of the reasons the Sussex team cite to support their contention that peer review is in danger of breaking down. They also suggest that priorities established just after the war have become entrenched in the science policy system.

Many scientists who had helped the war effort by devoting themselves to nuclear weapons and radar took their rewards in the form of generous backing for related areas of science like radio-astronomy and high energy physics. As these areas became more and more expensive, it seemed that researchers in such fields were first, second and third in the queue for money.

Today, the Science and Engineering Research Council's £250m annual budget is divided between four boards. Nuclear physics and astronomy and space research both have their own boards while one of the two remaining boards covers all of the rest of SERC's scientific interests.

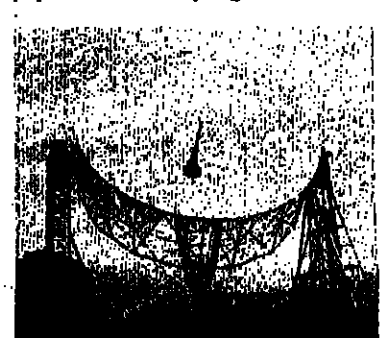
Martin and Irvine estimate that in 1979-80 more than £100m of the £141m SERC spent on science (ignoring expenditure on engineering) went on large, centralized facilities in Britain and Europe. The fact that this was the position at the end of a decade when the council was

explicitly trying to divert resources from big science to meet other priorities shows the enduring influence of the old patterns of spending. They also argue, more generally, that peer review is a poor mechanism for re-ordering priorities. It works when the only decisions to be made are on allocation of extra money to new projects, but not when it is necessary to decide who to cut. And even though the British science budget has far exceeded what government allocations elsewhere, there is increasing pressure to find money for strategic new areas from existing funds.

Last year's public dissent from the recommendation of the Advisory Board for the Research Councils by the chairman of the Agricultural Research Council was an early sign of the stresses the new distribution will produce in the existing system. If the ARC is cut when the SERC's clear physics board spends more than the smaller council's total share of the science vote, the output of the big science facilities is bound to come under closer scrutiny.

Leaving aside arguments over whether high energy physics or astronomy should be supported on this scale on what the physicist Alvin Weinberg christened "external" criteria, Irvine and Martin call for the development of new methods for deciding whether the money that is allocated is well spent - methods for judging the "internal" merit of a series of laboratories or research groups in the same field.

Early efforts toward a "science of science" or "scientometrics" were usually based on counting published papers, and analysing citations of



Jodrell Bank: is its reputation justified?

those papers by other scientists. Researchers constructed impressive-looking tables of publications and citations by poring over the various science citation indexes published by Dr Eugene Garfield's Institute for Scientific Information.

But the results are pretty crude indicators of the quality of research output. Apart from imperfections in the original citation indexes, which are designed for easy literature searches rather than as raw material for social scientists, such work often fails to take account of reasons for citation. The classic example of the weakness of this method is the importance of a simple approach accords to Lowry's technique for protein determination. This modest but useful laboratory test is so widespread that it generates thousands of citations a year of the paper describing its first use. But it is hardly a revolutionary scientific breakthrough.

However, the Sussex authors argue that this type of analysis can offer a guide to the impact a paper makes, if not its intellectual quality, and that when the results agree with those from other partial indicators, it is reason to believe them. Their method is to apply their indicators - number and cost of published papers, citation frequency, and subjective productivity estimates from detailed interviews with a proportion of scientists in the field - to a very similar institutions. In this way, the radiotelescopes at Jodrell Bank, Cambridge and Bonn or particle accelerators at Daresbury, Stanford and Hamburg can be compared, like with like.

Reactions to the early studies using this method have been mixed, to say the least. Irvine and Martin's paper or radioastronomy was in press two years ago but will not be published until next month. Changes had to be made to the text to meet

objections from some of the establishments whose records were scrutinized in the paper. The detailed results are not yet quotable, but it is known that Britain's Jodrell Bank telescope is shown to have a scientific record less distinguished than its high public reputation might suggest.

The delays this paper suffered led the *New Scientist* to allege, rather wildly, that the British science establishment is trying to suppress the SPRU reports. The actual response seems to be to play down their significance. When Irvine and Martin's paper on the Isaac Newton Telescope appeared last week, the leading scientific journal *Nature* suggested that it only confirmed what everyone already knew. The paper demonstrated that the Royal Greenwich Observatory's 2.5 metre optical telescope was singularly unproductive at its old site near Eastbourne. Certainly, the decision to move the telescope to the Canary Islands was taken several years ago, so its poor performance was already established before Irvine and Martin started counting papers. But they can point to this as evidence that their method works.

However, *Nature* concludes that when making new decisions rather than assessing old ones the key questions are still "more easily answered by hunch than by calculation". And in a BBC *Horizon* programme broadcast next Monday which ranges widely, and critically, over science policy, SERC chairman Professor John Kingman says that while the Sussex work is interesting, there is still no substitute for peer review.

Dr David Morley, who is pulling together ideas for "science audits" of the country's research effort at the British Association for the Advancement of Science, echoes this sentiment: "Assessment of research is always going to be subjective, and based on subjective assessments of the quality of the people involved".

These comments may just reflect a wariness about the application of semi-quantitative methods to an activity as complex and elusive as basic research. No one wants to see a slavish adoption of measures like bed occupancy in the health service which tell the reader much about administrative efficiency and nothing about the quality of care. But the insistence of scientific spokesmen on the supremacy of subjectivity seems at odds with their goals as researchers.

Is the division between the reputedly rational, objective and rigorous discipline of science and the hunches and informed guesswork of science policy to remain absolute? Perhaps few would accept Irvine and Martin's strongest claim - that there are now techniques "for evaluating past research performance in a rigorous and systematic manner" but there seems room for developing their work further.

Other research administrators certainly think so. Since their first studies of astronomy and physics were completed, the two have carried out projects for the Norwegian government on research productivity in state-funded laboratories and for the European Coal and Steel Research Programme. And they have just finished a major assessment of the scientific holy of holies - CERN.

They would like to try, and refine, their methods to help predict future research performance from a unit's past record but it seems unlikely that money will be found for this work in this country. However, some senior SERC figures are more sympathetic to approaches like this in private than in public, and there are some supporters of science policy research in the Department of Education and Science.

Sir David Phillips, the new chairman of the Advisory Board for the Research Councils, has also said he would like to improve the information the ABRC can draw on for its annual forward look. The job the proponents of these assessments have, whether they are supporters or critics of big science, is to put the case that it is in the interests of the physicists and astronomers that if their work is funded it is seen to be done well. Otherwise, it could well become vulnerable to unsympathetic questioning.

John O'Leary with details of the new course planning strategy

NAB's course action

The revelation last May that some 400 advanced courses in colleges and polytechnics, 15 per cent of the total, appeared to be running with fewer students than officially permitted under the course approvals procedure, was the talk of higher education at the time. It was to provide the National Advisory Body with its first major test of effectiveness and resolve and was widely expected to result in wholesale course closures and more than a few problems for certain institutions.

Starting as it meant to go on, NAB decided at once that the institutions would have to be given the opportunity to explain themselves, ruling out any hasty action. Some 50 courses included in the survey were already in the process of being closed by the department and NAB chose only a handful more for immediate examination. As a result, a mere four courses were refused approval for this academic year, two having been found to have closed already.

The remainder were split into two groups: those which had fallen below minimum recruitment levels in the year of the survey (1981) and those which had been below the target for two successive years. Faced with a formidable administrative task, NAB opted to defer consideration of the first group, which numbered 210 and had an average of 28 students in all years, until the main planning exercise for 1984-5.

Of the remaining 130 courses, it was decided to concentrate on 69 by

the time the accuracy of the survey had been checked and a number of courses which were no longer running had been discounted. This week the NAB board presented its recommendations on the fate of the remaining 69 to the body's committee and finally dispelled any fears that it would need a large package of closures to show toughness and readiness to act.

The board, with the support of the several DES representatives, has found only 15 courses deserving of closure this year. And eight of these have either been withdrawn by the institution itself already or are in their final year, some perhaps in anticipation of an unfavourable response from NAB.

One whole batch of 10 postgraduate arts courses were not considered individually, with a recommendation that an apparent mismatch between the number of courses approved by the DES (with the consequent assumption of student numbers) and the number of awards made by the department should be investigated before closures are ordered.

The board, on the advice of working groups where appropriate and the secretariat in other cases, gave its blessing to those courses which could be shown to have improved their recruitment records and/or which had the support of their regional advisory councils to continue. Some were successful on regional grounds, despite low numbers, while others were able to plead inter-dependence with successful part-time or other full-time courses.

Others had more individualistic explanations for poor recruitment, notably Leeds Polytechnic's "Yorkshire Ripper" effect, which was said to have discouraged enrolments in information science in 1980 and 1981. A more mundane and apparently acceptable explanation was the decline in overseas student numbers.

Courses approved by the NAB

Institution	Course	Minimum enrolment	Actual enrolment 1980	1981	1982
Brighton Polytechnic	BA (Hons) History of Design	24	17	21	28
Bristol Polytechnic	BA (Hons) Textiles Fashion	24	22	18	25
Central School of Art and Design	BA (Hons) Textiles Fashion	16	14	14	16
Kingston Polytechnic	BA (Hons) Textiles Fashion	24	22	21	24
Preston Polytechnic	BA Fashion Design	24	24	24	25
Manchester Polytechnic	BA Public Administration	24	20	21	28
	Diploma in Clothing Design	24	19	18	18
	Diploma in Personnel Management	24	22	20	29
Middlesex Polytechnic	BA Contemporary Culture Studies	24	13	22	32
City of London Polytechnic	Diploma in Psychology	10	8	2	1
Huddersfield Polytechnic	ACCA Professional Course in Accounting	24	12	15	15
Nottingham Polytechnic	1980 Production Engineering	24	16	9	18
Leeds Polytechnic	BSc Information Science	30/12	7	10	16
	HD Civil Engineering	24	22	21	29
	BSc Production Engineering	24	22	17	27
	Diploma in Administration Studies	24	22	14	19
Mid-Kent College of Higher Education	ADA Level 11	24	14	18	19
	ADA Level 12 and 3+	24	18	17	17
	TEC HD Building	24	6	16	17
North East Surrey College	Institute of Biology	20	16	12	17
North London Polytechnic	Diploma in Management Studies	24	12	21	21
Oldham College of Technology	HD Media Civil Engineering	24	11	11	24
Southall College of Technology	CBI Part 2	24	23	20	23
Warley College of Technology	HND Mechanical Production Engineering	15	21	11	14
North Staffordshire Polytechnic	Postgraduate Diploma in International Marketing	10	10	10	8
Portsmouth Polytechnic	IPM Part 1†	20	16	8	10
Birmingham Polytechnic	CBI Part 2 (Electrical Engineering, Mechanical Production Engineering)	24	9	16	22
	TEC HD Civil Engineering Studies	24	19	14	22
Polytechnic of the South Bank	BSc Mechanical Engineering	24	21	20	20
Willesden College of Technology	CBI Part 2	20	14	26	18
Wolverhampton Polytechnic	TEC HDH Civil Engineering	24	15	17	24
North East London Polytechnic	CBI Part 2	24	11	14	8
	BSc Manufacturing Studies	20	18	20	29
Bolton Institute of Higher Education	BSc Electrical Engineering	20	20	20	21
De Montfort College of Art and Design	CBI Part 2	15	12	20	12

* Course withdrawn by institution or not planned for 1983/84.

† Approval granted for 1983/84 only.

Courses where approval has been withheld by the NAB

Institution	Course	Minimum enrolment	Actual enrolment 1980	1981	1982
Bradford College	Foreign Correspondence/Translation	24	16	12	—
Polytechnic of Central London	Cambridge Diploma in English	24	12	10	8
Hammersmith and West London College	IPU Stage 1 and 2	24	20	18	16
Walsby Technical College	Management Services Diploma	15	14	12	—
Huddersfield Polytechnic	Management Diploma in Marketing Studies	24	21	18	17
Northington College	BA Movement Studies Education	24	14	17	14
South West London College	Diploma in Administrative Management	24	19	16	12
Sunderland Polytechnic	Foundation Course in Accountancy	24	16	17	—
Waltham Forest College	ADA Level 1	24	22	17	18
Willesden College of Technology	Diploma in Transport Management	24	18	17	8
	Electrical Engineering Certificate	24	10	8	12
Liverpool Polytechnic	Institute of Building Association Part 1†	24	11	16	—
Luton College of Higher Education	HND Mechanical Engineering	24	17	11	—
Preston Polytechnic	CBI Part 1 Electrical Engineering	24	6	11	—
Richmond College	HND Measurement Control	24	6	11	—

* Course withdrawn by institution or not planned for 1983/84.

† Approval granted for 1983/84 only.

H. T. Dickinson celebrates the 350th birthday this week of Samuel Pepys,

Few people will remember that the 350th anniversary of the birth of Samuel Pepys fell on Wednesday but a vast number will associate his name with the greatest diary ever written in the English language. During his life Pepys rose from relatively humble origins to become the greatest civil servant of his age, the creator of an important library, a celebrated virtuoso, and a close friend of many of the leading intellectuals of his day.

For more than a century after his death, however, he was known only to a few scholars. In 1825, with the publication of about one quarter of his private diary, Pepys suddenly became famous. Fuller editions followed, but not until 1976 was the complete text finally published under the editorship of Robert Latham and William Matthews. This has given the world a knowledge of Pepys's daily life and personal character more intimate and detailed than that of any man who has ever lived. The Diary's rich detail - over 1,250,000 words covering less than 10 years of Pepys's life - has been pillaged by many scholars seeking specific information on particular topics, but relatively few have concentrated on the central concern of the Diary - the complex and fascinating character of Pepys himself.

Samuel Pepys served the crown for nearly 30 years, rising from a humble position on the Navy Board to being the King's right-hand man in virtually complete control of the Admiralty. Although the least military of men, Pepys's administrative talents made him the architect of a great fighting service. Almost every aspect of naval administration was improved under his stewardship. He drove through both the largest building programme and the most complete re-fit that the Navy had ever undertaken. No aspect of naval administration escaped his interest or control: he tightened up the methods of victualling and supplying the fleet; he tried to control corruption among ships' pursers; he improved the navigational skills of ships' masters and all officers; and he supported the efforts of others to improve the care of the sick and wounded. Pepys even worked hard, though not always with success, to secure the proper food and pay due to ordinary seamen and to control the worst abuses of the press gang.

Pepys has long been recognized as a great administrator, but it is his role in the rise of the professions in late Stuart England that has recently attracted most interest. Geoffrey Holmes, in *Augustan England: Professions, State and Society 1680-1730* (London, 1982), has recognized Pepys's important contribution to the professionalization of the Navy and the Civil Service. When Pepys first came to office the career of the Navy officer was socially as well as professionally undesirable. The work was hazardous, the pay was low, employment and promotion prospects were uncertain, and dignity and status were generally lacking. Pepys wanted to create a profession that could offer to those who chose it permanence, profit and honour in equal measure.

The three reforms which he regarded as essential were the testing of an officer's technical competence before he was commissioned, the retaining of officers in regular employment or on the half-pay reserve, and promotion to the highest ranks on the basis of seniority. The first of these he fully accomplished; with the others he made significant advances. More than anyone else he laid the foundations of a permanent and professional officer corps. Those officers who rose because of their seamanship and experience learned to aspire to gentlemanly manners and life-style, while those of gentle birth were no longer found wanting on the score of seamanship. Pepys laid thus promoted both technical revolution and social evolution.

Pepys also played a major role in the rise of a professional and non-political Civil Service. He did much to develop the Admiralty and the Navy Office where there was a wider range of jobs to be filled than in any other sector of government service. Many of these jobs called for specialist skills or knowledge and some carried considerable responsibility. As



Samuel Pepys, 1633-1703: "What a man's mind is, that is what he is."

The compleat diarist

Pepys's own career bears witness, the able and dedicated official had unusually good opportunities for inter-departmental transfer between the two departments. The expansion of the Civil Service was a marked feature of later Stuart England and the growth of specialization and departmentalism was particularly marked in the administration of the Royal Navy. Opportunities for advancement, from bottom to top, in the Navy Office were there for every ambitious government servant. But it was Samuel Pepys who first made this astonishing climb and he carried with him other examples of the successful civil servant, most notably William Hewer, Anthony Deane and Josiah Burchett.

Pepys's greatest successes in public life were achieved in the 1670s and 1680s. Since 1825, however, his greatest claim to fame has rested on the private diary which he started in January 1660 before he had achieved any important public office and which he abandoned in May 1669 just as he was beginning to make a name for himself. Pepys and his contemporaries would have been amazed had they known that his subsequent fame would rest so heavily

on this private journal written at the outset of his public career. After all Pepys deliberately kept his Diary secret and he never made any attempt to have it published. He wrote the Diary in a shorthand cipher and he kept it permanently under lock and key in order to preserve its secrets even from his closest friends and nearest relations.

Scholars have always been puzzled as to why Pepys spent so much of his busy life in the 1660s writing such an enormously detailed diary and why, having kept it so secret, he bound it in six handsome leather volumes which he catalogued and included in his library that was donated to Magdalene College, Cambridge.

Pepys may have kept the Diary for pleasure so that he could re-read it and remind himself of past enjoyments and triumphs, although there is in fact no record of him using it for this purpose. His Puritan heritage may have encouraged him to account for his time, to record his moral lapses and to examine his conscience at regular intervals. Certainly, at the end of some months and more fully at the end of each year Pepys drew up a balance sheet for both himself and the nation. The Diary may have

stemmed from Pepys's natural interest in order, system, discipline and history. It is undoubtedly full of factual details about the external world, but there is also a great deal about Pepys's inner life. Perhaps a deep need to impose a pattern on the shapelessness of existence and a strong desire to observe and to understand himself led him to keep such a Diary. It is almost as difficult to explain why Pepys preserved his Diary so carefully as to understand why he wrote it. He may have intended that it should be read by future historians, but there is little to suggest a deliberate plot for the ultimate discovery of his own secrets. It is more likely that, as a prodigious effort to explain himself to himself, the Diary became one of Pepys's most treasured possessions and so long as he had it in his keeping he felt he could retain links with the most exciting decade in his life. After his death, while it existed in his library, it could give him a kind of immortality.

That Pepys regarded the Diary as a vital part of his existence is made clear by the deep sadness with which he ended it when his eyesight deteriorated alarmingly. "And so I be-

take myself to that course which is almost as much as to see myself go into my grave - for which, and all the discomforts that will accompany my being blind, the good God preserve me."

Political and social historians have long recognized the immense value of Pepys's Diary with its great mass of hard factual information. Pepys was very well placed to gather political news and gossip since he spent nearly all his life in the capital and frequently visited the court, Parliament and the Royal Exchange where he had well-placed informants. In taverns, shops, playhouses, in streets he talked with all classes of people. Pepys was a marvellous chronicler of the public mood during the early months of the Restoration, the second Dutch war, and the great Plague and Fire of London. His Diary is also full of useful comments on debates in the Commons, on waste and immorality at the court, on the James, Duke of York, and on the ministerial changes of 1673-74.

For the social historian one of the great merits of the Diary stems from Pepys's intense curiosity, diverse interests and boundless vitality. He had enormous enthusiasm for ordinary people and everyday life. The Diary is full of detailed and precise information about clothes and furnishings, food and drink, weather and transport, books, plays, music and serious, Pepys mixed with courtiers and administrators, merchants and seamen, actors and intellectuals, innkeepers, shopkeepers and servants, coachmen and watermen.

Much of what Pepys wrote about his political and social world can now be gleaned second-hand in professional historians' accounts of Restoration England, but, in at least two major respects, the Diary itself still remains very close scrutiny by the interested layman in the present age. Nowhere else can one find so brilliant and so full an account of an actual man as he actually was. And nowhere else can one find better evidence of a man's attitudes towards and relations with a whole range of women.

Perhaps the most astonishing feature of the whole Diary is the fullness and variety of its portrait of Pepys himself. No other diarist has been so incredibly honest or has laid himself as bare as Pepys. His Diary is a microscopic observation of himself as he actually was. Egocentric, selfish and emotional though he was, Pepys succeeded nevertheless in being so detached that he appears in the Diary as both the observer and the observed. He recorded not only his public behaviour and his private, even secret, acts, but also his thoughts, feelings, hopes and fears. He rejoiced confidently in his public achievements and in his private triumphs, but also tortured himself with doubt and self-accusation. Occasionally, Pepys betrays weaknesses and failings of which he himself was unaware, but he also records numerous acts of which he was clearly ashamed and which he desired to keep hidden from the rest of the world.

Pepys confessed in his Diary when he was in bed, when he suffered from severe constipation, when he struck his servants, when he was fearful of being attacked or robbed, when he showed an unhealthy interest in dead bodies, and when he forced his attentions upon reluctant females. He even admitted that while the country was raged in London and the country was at war he personally experienced the greatest wealth and profit in his life. In these instances he asked for God's forgiveness or support. At other times he was less conscious of his selfishness or shameful behaviour. On January 6, 1663 he recorded a quarrel with his wife because she had left some clothes on a coach. "I confess she did give them to me to look after - yet it was her fault not to see that I did take them out of the coach." On August 18, 1667 he visited St Dunstan's church, "and stood by a pretty, modest maid, whom I did labour to take by the hand and the body; but she would not, but got further and further from me, and at last I could perceive her to take pins out of her pocket to prick me if I should touch her again; which seeing, I did forbear, and was glad I did espy her design."

chronicler, administrator, reformer, innovator, bon viveur and womanizer

Pepys's reputation with women has for too long been that of the amorous buffoon who could not keep his hands off women. The Diary is extremely frank about his relations with women, though what Pepys revealed to himself may not be quite the same as what he reveals to us today. Certainly, his relations with women were extremely complex and they covered a whole range of emotions and actions. Pepys had a great admiration for physical beauty in women and he would go miles out of his way to catch a glimpse of a pretty face. He clearly enjoyed the society of women and loved to converse with them. On the other hand, his sexual appetite has often been exaggerated and misunderstood. While occasionally lecherous he does not appear to have regarded the sexual urge as a liberating force or the sexual act as a fulfilment of the personality. He was usually ashamed of his sexual escapades and he was invariably concerned only with his own immediate pleasure. There are few indications that he ever thought about the sexual needs and desires of his partners. On the one occasion when he did record that he had produced a strong sexual reaction in his wife, on February 7, 1669, he took fright and decided to be more careful in future! His affairs with other women were always cautious and calculating, and usually cold-blooded. The were never with his social equals or superiors, despite his erotic dreams of Lady Castlemaine, but always with servants, actresses, prostitutes or women seeking his official help. Pepys often took callous advantage of these women, even to the extent of employing some physical force, and yet he despised them whenever they gave in to his demands. The strongest impression left by his sexual exploits is not that of him genuinely enjoying intimate relations with the opposite sex, but of him being rather afraid that women might gain a hold over him. This reinforced his determination to exercise power over them.

Pepys's relations with his wife are particularly interesting, complex and unpredictable. It was a childless marriage which oscillated between affectionate intimacy, violent quarrels and even estrangement. Pepys admired his wife's beauty and took pride in her appearance; often to the extent of regarding her as a prized possession. Despite his own numerous affairs he was extremely jealous when other men took an interest in his wife. Though concerned about the state of her health, he was often irritated when severe monthly periods confined her to bed. Often extravagant himself and delighting in his freedom, he always kept his wife short of money and refused to allow her an independent existence. And yet there was another side to their relationship. Pepys married her for love, when she was young and penniless. He thoroughly enjoyed talking matters over with her, they shared a variety of social activities together, and he encouraged her interest in arithmetic, painting, music and dancing. There is abundant evidence that he often enjoyed her company, usually wished to be on good terms with her and occasionally valued her judgment. None the less, the dominant feature of their marriage was Pepys's constant efforts, and repeated failures, to control his wife so that she might serve his ends and not expect too much from him in return. While Pepys may have had male chauvinist tendencies and often wished to play the tyrannical husband, he was never able to dominate his wife for very long. That he did not succeed is a tribute to his wife's fighting qualities and an indication that husbands could not always control their wives even when the patriarchal theory was at its height. That we know this is a testimony to Pepys's honesty in recording his constant and unsuccessful struggle for dominance. Pepys's frankness, and his intense interest in the external world and his inner life, have combined to produce the most informative and the most fascinating diary in the English language.

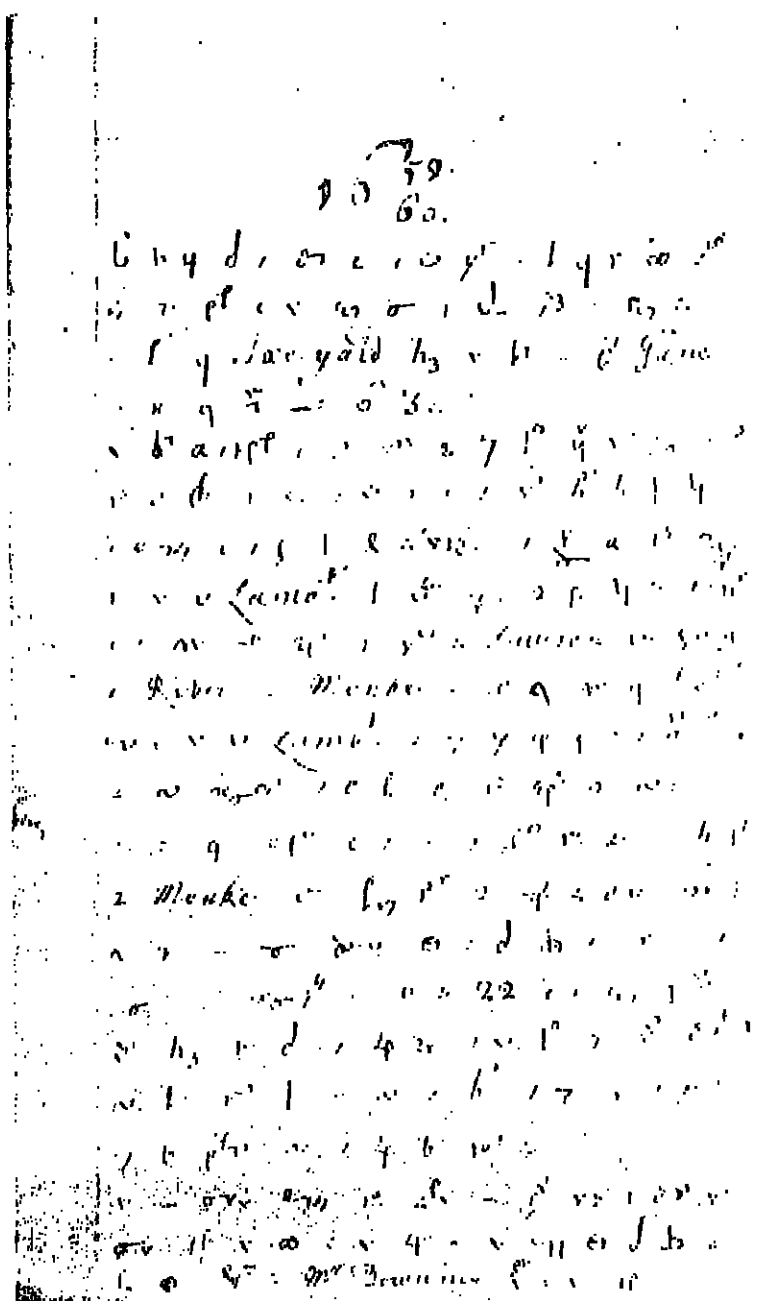
After a decade and a half of its existence Conall Boyle asks . . .

Has the CNAA experience been worth it?

Launched in the 1960s during the white heat of Harold Wilson's technological revolution, the Council for National Academic Awards was hailed as a bold innovative stroke. At last the newly formed polytechnics could escape the strait-jacket of the London University external examinations. The CNAA was not only to be the validating body for the new institutions. In keeping with the intentions of the founders of the polytechnics, the CNAA was to encourage newer, more imaginative approaches; cross modular subject groupings were to be encouraged. To achieve these ambitious aims, the CNAA required that all courses be developed by inter-disciplinary course development teams.

After a decade and a half, how have these noble ideals been implemented? A full-scale review which looked at generalities might show that much progress has been made: several hundred new degree schemes approved and running, a vast army of graduates through the system. However, more recently evidence has come to light which seems to indicate that the current CNAA degree schemes are little different from the old schemes they in part replaced; and that innovation, where it has occurred at all, is to be found in the university sector.

The evidence for this comes from a recently published report, *First Year Quantitative Methods on Business Related Degree Courses in England and Wales*. This investigation was undertaken by a group of enthusiastic polytechnic lecturers at Birmingham Polytechnic, in part as a



The opening page of Samuel Pepys's Diary, written in his characteristic shorthand. The introduction, undated, but preceding the entry for January 1, 1660, begins: "Blessed be God, at the end of the last year I was in good health without any sense of my old pain but upon taking of cold. I lived in Axe-yard having my wife and servant Jane, and no more in family than us three." Reproduced by permission of the Master and Fellows, Magdalene College, Cambridge.

After a decade and a half of its existence Conall Boyle asks . . . Has the CNAA experience been worth it?

preparation for a new CNAA degree re-submission. Quantitative methods mathematics and statistics is traditionally a difficult subject. Students dislike it because it seems unrelated to their main stream subjects, and is often taught in an unimaginative way. Here, surely is an area where the CNAA philosophy could blossom? There are plenty of alternatives to the traditional approach.

So what did the investigation reveal? After all those colleges sat down to design their degree courses in the light of their experience, you would expect a wide divergence of topics, approaches, time spent on the subject. Not a bit of it. Out of the 183 courses investigated, the outstanding feature was their uniformity. In the case of accountancy degrees this uniformity was almost total. In vain does one search for the college that adopts an integrated subject approach. Nowhere is the kind of modern media-based approach to statistics proposed by J. W. Tukey to be found. On degree after degree, the same old menu of topics, dealt with in the same way are to be found. It is as if the CNAA had never existed, and London External still ruled.

In fairness one should point out that some divergence of topics was to be found - in the university sector. It would also be right to point out that this variety took the form of a somewhat idiosyncratic choice of topics, whose relevance to business is difficult to discern.

Perhaps the most surprising finding of the investigation is that it was necessary at all. The CNAA already

The making of a navy

After the *Diary*, Samuel Pepys's most concrete contribution to English life was his reform of the Navy. We are nowadays accustomed, even after a war in the South Atlantic which demanded the temporary requisition of merchant ships, to a complete separation of the merchant marine and the Royal Navy.

The navy of Drake or Hawkins was not an autonomous, permanent and systematic military force. There was no proper career structure, no central naval authority, no uniform. Merchant ships, like the cumbersome 500-ton East Indiamen, were routinely armed to protect them from privateers and the vessels of rival nations on their months-long voyages from home. In time of war, it was perfectly usual to put these ships in the fighting line. The Navy was, before Pepys, a ramshackle, ad hoc affair.

During the seventeenth century, England supplanted Holland as the world's leading maritime power. The requirements of distant commercial interests increasingly called for a powerful, centrally organized navy. Pepys recognized very quickly that the hush of such a navy would be a cadre of professional seamen of the officer class. Before his time, there had been no tradition of continuous service and fighting naval officers were accustomed to signing on for duty on merchant ships during periods of relative tranquility.

There had developed a deep social and political fissure in the Navy between the "bred seamen" or "turpitudes" and the royalist "gentlemen", courtiers, favourites, amateurs, who were placed in senior positions after the Restoration. Pepys was nothing if not shrewd; though irritated at the incompetence and lassitude of royal placements, he knew that they provided a powerful political lever. The first steps towards the establishment of a permanent officer cadre was taken in 1677 with the introduction of an examination for the rank of lieutenant, a rank which henceforth required three years' active service as a midshipman.

Commissions were in the gift of the King and Lord High Admiral. Pepys's Navy Board, which he had taken over in 1673, was concerned with the maintenance of ships, dockyards, victualling and pay; they also looked

after guns and ammunition. Traditionally, only the standing officers, the gunner, the cook, the boatswain and the carpenter, came under the direct jurisdiction of the Navy Board. Increasingly, though Pepys's board, with its powerful aristocratic membership, took independent responsibility for commissioning officers. Ironically, their executive authority very closely resembled the naval administration of Cromwell's Commonwealth.

The new Navy demanded colossal expenditure but brought immense gains. The prize ships captured from the Dutch vastly increased the size of the Navy and simultaneously increased its power and the difficulties of administering it. A massive battle fleet of scores of fighting ships demanded a clear hierarchy of command. The fleet was thus divided into distinct squadrons - the Red or Centre, the White or Van, and the Blue or Rear - and power was devolved through the creation of the command ranks: admiral, vice admiral and rear admiral.

Pepys was equally shrewd in his reform of the Navy's finances. He was well aware that in any operation so large and diversified, some degree of corruption and self-serving was inevitable. It would be fair to say that, rather than stamping out fraud, Pepys rationalized it. The establishment of a rational pay system and the commissioning of men to tally each ship's and dock's expenses streamlined the system and made it more effective.

Pepys knew well enough the value of compromise and recognized the sources of his power and the responsibilities he owed his masters. He was no revolutionary. It would be inaccurate to claim that single-handed, he created the modern Royal Navy. Nor did he solve all the problems that English naval power had suffered from Drake onwards. The multitudes of ends was taken in 1677 with the introduction of an examination for the rank of lieutenant, a rank which henceforth required three years' active service as a midshipman. Commissions were in the gift of the King and Lord High Admiral. Pepys's Navy Board, which he had taken over in 1673, was concerned with the maintenance of ships, dockyards, victualling and pay; they also looked

from this system. The syllabus laid down tended to ossify, and become stale. It also allowed no input from some of the people who knew what could be learned best - the classroom teachers. The need for an up-to-date syllabus in statistics as in other subjects has become more acute in the last couple of decades, especially with the advent of the micro-computer. Rather than going back to an old, but flawed model, we should look to a CNAA-based system which is less wasteful of the time of lecturers, and also allows, indeed encourages, sensible and necessary innovation.

As a first step, the CNAA could issue an advisory syllabus along the lines of the current consensus. This could then be inserted without further embellishment in any course. By means of conferences, surveys or from specially convened panels, alternative schemes could be proposed. Such proposals would gain stature by going through a type of validation process at the CNAA. As each new scheme comes out, all lecturers would have a chance to comment; in this way we would not lose what is undoubtedly a strength of the present system: lecturer participation. But participation, however desirable, should never be achieved at the expense of the main-stream activity of a teacher, namely to teach (and not to sit on committees discussing course development).

The inevitable conclusion seems to be a call for a return to the old London External system of centrally dictated syllabuses. But let us not forget the reasons for departing

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BOOKS

Modern Socratic tutorials

Plato's *Phaedrus* an interpretation by Kenneth Dorter
University of Toronto Press, £21.50
ISBN 0 8020 5550 8
Plato's *Protagoras*: a Socratic commentary
by B. A. F. Hubbard and E. S. Karanitsky
with a foreword by M. F. Burnyeat
Duckworth, £18.00 and £7.95
ISBN 0 7156 1642 0 and 1640 4

Plato's *Protagoras* and *Phaedrus* are a marvellous pair. They are literary as well as philosophical masterpieces. *Protagoras* has Socrates at his liveliest and best, with *Protagoras* and other sophists as excellent foils. There is conversation full of irony and wit, there are stylish speeches, and there are subtle and provoking arguments – a marvellous entertainment. *Phaedrus* has as rich a diversity of literary colours, though seriousness and gravity are dictated by the theme, and it is a very different Socrates – a spiritual sage – who dominates both argument and drama. Both dialogues have been very carefully studied in recent years, in particular the translations and commentaries by C. C. W. Taylor (1976) and D. Gallop (1975) summed up much previous work and carried it further. But the volumes now under consideration have something new to offer.

Professor Dorter's aim is to bring together two approaches to Plato which have often been adopted separately by practitioners: suspicious of one another. On the one side are the minute philosophers devoted to argument-analysis and philosophical criticism, on the other side are classical philologists sensitive to every literary and dramatic nuance and beauty of Plato's dialogues. Lip service may be paid by both parties to the idea that a proper understanding of either the philosophical burden of the dialogue or its literary form and character must require attention to both, but the philologists are not really interested in (or good at) close philosophical argument, and the philosophers are not really interested in (or good at) sensitive literary interpretation. Professor Dorter hopes to bridge the gap, and to do justice to both aspects of the *Phaedrus*. Since the dialogue treats of a wide range of important subjects, he hopes that his interpretation of it will increase understanding of Plato's philosophy in general.

How far has Dorter succeeded in combining the two approaches? He has wisely abstained from the wild inferences and vague speculations sometimes made by the literary school. On the positive side, his emphasis on the organic structure of the dialogue is illuminating, and he brings out contradictions and echoes that might easily be missed; he makes us attend to recurrent themes as well as to discrete stretches of argument. In the end, however, the non-philosophical points he notes or emphasizes play a relatively slight role in his interpretation of the argument and drift of the *Phaedrus*; they serve to confirm or to decorate rather than to establish any conclusions. It is no doubt self-evident that a full understanding of a Platonic dialogue requires sensitive study of it as a work of literature. It is less clear and less readily shown that such a study has much to contribute to a full understanding of the philosophical issues and arguments in the dialogue.

Dorter's own account of the structure of the *Phaedrus* and his interpretation of its particular arguments (some of which he has already treated in published papers) contain a number of original ideas and suggestions, but they are not always formulated with sufficient clarity and rigour. Not least, such suggestions are not always supported by evidence or by argument.

versions of passages he quotes, and these contain quite surprising errors and oddities. In short, the book will be safer in the hands of mature Platonists than in those of innocent beginners. The former will find it interesting and thought-provoking.

The *Protagoras* volume contains a translation of the dialogue and a commentary. Both are excellent, and together they make this an unusually enjoyable and rewarding book to read and to study. The translation combines accuracy with felicity. The felicity is not a kind of uniform elegance but a sensitive appropriateness: pleasantly colloquial stretches of dialogue read pleasantly and colloquially, pompous speeches sound pompous in the English, parodies read like parodies. (Here is a tiny example. The doorman, irritated when some callers he has already sent away knock again, utters words that might be rendered literally: "O men, have you not heard that he is not at leisure?" This would of course be found ludicrous and repellent by the normal reader – though many translations do give equally stiff and unnatural renderings of such utterances. In the present version we get just what any irritated doorman would say: "Hey you, didn't you hear me say 'Master's busy'?" The requirements of accuracy also vary. For whereas in narrative and what an ordinary correctness of translation is sufficient, in passages of close philosophical argument details of vocabulary and structure should if at all possible be meticulously preserved. Here again the translators are remarkably successful.

To each section of the translation there corresponds a section of the commentary. This is, as advertised, a "Socratic commentary": it consists almost entirely of questions. These are cunningly arranged, so that later questions on a given stretch take for granted that earlier questions have been pondered. Nobody will get profit or pleasure by reading straight through the commentary without thinking for himself about the issues. But the reader who plays the game, puzzling over one question before moving on to the next, will find his understanding deepened by the increasingly probing questions, and he will enjoy the process.

The questions deal with all the strands in the *Protagoras*. They direct attention to dramatic structure and literary features, to characterization and the interplay of personalities, and (above all, naturally) to the sequence of thought and the analysis of arguments. The reader is forced both to get clear what is going on in the arguments and to think for himself about the issues raised. Forced and helped: for the questions will not leave him floundering. The authors supply skilful unobtrusive guidance, partly by giving useful background information, and explanation, and partly by the formulation of the questions themselves. This is in fact the tutorial system, the ideal system for teaching philosophy. It is true, as Plato himself emphasizes, that the book will never be able to replace the living teacher – nor even, one hopes, will the computer; but a book such as this will be a serviceable substitute for a good tutor, or a valuable tutorial aid.

Not all Plato's dialogues will be as suitable as the *Protagoras* is for this type of commentary. (Even here there are one or two stretches that might perhaps be better handled by didactic exposition than by tutorial inquiry.) But I agree with the claim that this book is a real contribution to education, and that its authors have devised a new way of writing about literature. Other publications along the same lines are to be expected, but to be anything like as good as the present volume, their authors will have to have exceptional pedagogical skill as well as sound scholarship and philosophical acumen.

J. H. Ackrill

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Aristotle's *De Generatione et Corruptione* translated with notes by C. J. Williams. Published Clarendon Press Oxford University Press at £12.50 and £5.00

Greek theories of hedonism

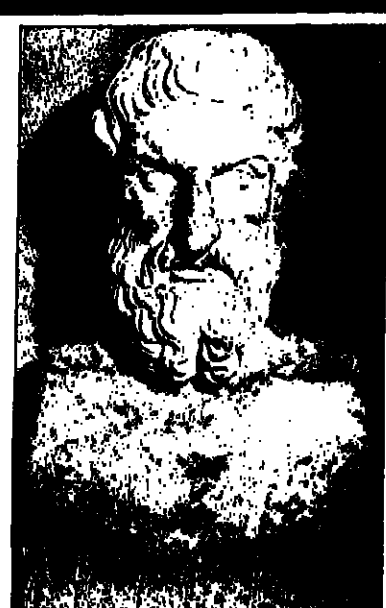
The Greeks on Pleasure
by J. C. B. Gosling and C. C. W. Taylor
Clarendon Press: Oxford University Press, £22.50
ISBN 0 19 824666 8

To decide "how best to live" we must know what ends to pursue. Pleasure seems self-evidently desirable; but reflection upon the long-term dangers of sybaritism makes us search for other accounts of happiness. Since Greek ethics tended to seek justification in the happiness of the moral agent, Greek moral philosophers typically gave some account of the status of pleasure in the good life. Indeed it is surprising that we have lacked comprehensive surveys of the history of Greek hedonism. Now, however, J. C. B. Gosling and C. C. W. Taylor's *The Greeks on Pleasure* brings together the scattered controversies into a significant whole.

Inevitably, the book is dominated by Plato, Aristotle and Epicurus; but there is also brief treatment of the early literary sources, and some discussion of other philosophers – Democritus, Aristippus, Eudoxus and the Stoics – as well as some rather cagey material on Socrates. In general the authors grasp scholarly nettles with courage and decision. They present us with consistent and coherent theories of pleasure in Aristotle and Epicurus, and a straight line of development in Plato from the *Philebus* right through to the *Protagoras*.

At times, this attention to controversy upsets the balance of the book. For minute of interpretation take up a good deal of space and obscure the overall structure of argument. At times, too, the argumentation is opaque, and could have been clarified by better schematization. That said, the book comes up with exciting and original reinterpretation of the cruces of the Aristotelian and Epicurean theories of pleasure. In the latter case the authors argue that the distinction between kinetic and katastematic pleasures can be brought into line with an overall theory of pleasure, not mere insensitivity. For Aristotle they dispute both the traditional view that the two accounts of pleasure in the *Nicomachean Ethics* are inconsistent and G. E. L. Owen's explanation of this in terms of shift in Aristotle's project. In the contrary, both passages view pleasure as perfect actualization, as Aristotle maintains, albeit against different opponents, that "in some sense pleasure is the good". This ethical thesis is underpinned by, and coherent with, Aristotle's metaphysical account of potentiality, actuality, process and change. The argument against Owen is not always convincing. It is, largely negative; Owen's claim that the book's ten material is concerned with "the logic of pleasure – verbs" is argued, if ill-fortuned, but the argument is, in my view, too thin to support the claim that the evidence of cross-reference to the *Physics*, where the behaviour of verbs, particularly with reference to the instantaneous "now", dominated a discussion which is linguistic, not practical or ethical. But the conclusion, that pleasure is a formal cause, is excellently drawn – challenging and ultimately extremely persuasive.

The earlier chapters on the rich material from Plato are not a search for consistency, but rather an analysis of the conflicting respect for a hedonist bias for pleasure. With the general view of Plato's attitude to hedonism they diagnose the implications as primarily to the physical pleasures of sybaritism, as opposed to the uncontrollable and non-rational effects of luck. In this way the apparent divergence of *Protagoras* and *Gorgias* is reconciled as a difference of project, rather than a radical change of doctrine. Throughout Plato is represented as trying on various general theories of pleasure, but frustrated finally in the *Philebus* when he realizes that pleasures are so dissimilar that they cannot be classified together or unified under a single theory. De-



A bust of Epicurus, taken from *The Sculpted Word: Epicureanism and Philosophical Recruitment in Ancient Greece* by Bernard Frischer, (California University Press, £24.00).

spite this view of the *Philebus*, the entire discussion of Plato is heavily influenced by that late work.

This is nowhere more true than in the account of pleasure in *Republic IX*. The concerns of the *Philebus* and those of the *Republic* are seen as coherent, albeit different in conclusion, and the epistemological background of both works is, it is im-

Life of a city

Thebes in the fifth century: Heracles reemergent
by Nancy H. Demand
Routledge & Kegan Paul, £9.95
ISBN 0 7100 9288 1

"Boeotian swine." Such was the immortal insult hurled against the Thebans and other ancient Boeotians by their sleeker and more powerful neighbours in Athens. As it happens, the point, one of the 10 well-produced plates in Nancy H. Demand's slim volume (a revision of a 1978 Bryn Mawr dissertation tailored for Routledge's regional series) depicts a handsome terracotta porker, indisputably Theban in origin and conception. Yet it is very far from Dr Demand's intention to endorse this antique caricature. The clay pig, for example, characteristically serves her both as an illustration of Theban artistry and originality, and since it was found in a Greek city of southern Italy, as the stimulus for an imaginative meditation on possible philosophical connections between Thebes and the Pythagorean communities of the *mezzogiorno*.

Imagination, though, has its costs as well as benefits. Dr Demand's aim of writing a rounded social and cultural history, not just a tale of battles and political power-struggles, is of course laudable in principle; and her chapters on the religious cults, philosophy, music and poetry, and visual arts of Thebes in the fifth century do certainly highlight the ingredients missing from John Buckler's otherwise admirable recent study of Thebes and its potential. But even Dr Demand cannot avoid the limitations of the dearth of contemporary, objective, unambiguous and directly relevant evidence. The reader is left with the impression that what few strands of such evidence there are available have been too often teased, twisted and stretched beyond their natural capacity to inform.

Not, it seems to me, does Dr Demand help her case for a broader consideration of the cultural and intellectual life of the city by continuing her attention to the fifth century on 431, the terminus date of R. J. Buckler's recent Boeotian history, but in no sense a natural break. Moreover, by choosing to open here she has done herself the possibility of revealing more than tantalizing glimpses of what is surely Thebes's most interesting and best documented epoch, the first half of

the fourth century. For example, her long and stimulating chapter on philosophy in Thebes, in which she draws attention to the influence of the Pythagorean émigré Lysis, can only make us desiderate a full discussion of the contemporary view that Thebes did not become powerful until in the early fourth century her leading men became philosophers. So too, although institutionalized pederasty is succinctly and tellingly analysed, its decisive military application in the form of the Sacred Band (150 couples) receives only a mention, since this was a creation of the 370s.

It is perhaps her crisp account of the sophisticated federal organization of the Boeotian League which most suffers from this chronological Procrusteanism. Some sort of loose political confederacy was in existence by the late sixth century, but Dr Demand argues cogently that the League established in 447 was essentially a new body brought into being under the aegis of Thebes. She could have added that initially it had the support of Sparta, who thereby made an exception to her normal policy of dividing and ruling her subject allies. However, our only detailed anecdotal description of this Boeotian League applies to its internal organization, to 395, just before Sparta, reviving its ties with Thebes, retook the city of Orchomenos. Nine years later, Sparta formally dissolved the League, so that when Thebes was in the process of Spartan wishes and correspondingly on democratic no longer oligarchic lines. To omit these fourth-century vicissitudes is inevitably to distort the proper historical perspective.

In 335 ac Thebes was razed to the ground by Alexander the Great as an awful warning to other potential Greek rebels against the Macedonian Great Idea. The only secular building he deliberately left standing was that of a defenceless temple, the temple of Athena, about whom Dr Demand has many enlightening things to say. But in the long view it was the sparing of Pindar's house and not the obliteration of Thebes that is surprising. For in struggling relentlessly for the unchallenged hegemony of Boeotia, Thebes had been directly and indirectly contributed to the destruction of several other Boeotian cities, most notably the recumbent Plataea. No amount of imaginative reconstruction of fifth-century Thebes as a flourishing centre of high culture should be permitted to obscure the brutality of her *Realpolitik*.

Paul Cartledge

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BOOKS

Balance of life

Lamarck the Mythical Precursor: a study of the relations between science and ideology by Madeleine Barthélemy-Madaule translated by M. H. Shank
MIT Press, £14.00
ISBN 0 262 02179 X

Lamarck was the pre-eminent French natural scientist in the interregnum between Buffon and Cuvier, but he achieved none of their worldly success and was scarcely read in his own day. In part this was because his inelegant prose cut him off from a popular audience, in part because his ineptitude at winning state patronage left him isolated even in the scientific world.

His failure to command any public interest in Napoleonic France, however, is also attributable to the fact that he was a figure of the Enlightenment who had outlived his time. Most of the leading philosophers had died before the Revolution, and such distinguished men of science of his generation as Lavoisier and Condorcet died in it. Lamarck, by contrast, was in his sixties and seventies in the first two decades of the nineteenth century when his most significant publications appeared.

The great age of natural history from which he sprang was then nearing extinction, and an unfamiliar science of biology (though he helped coin the word) was only just beginning to bud. With abstract systems of ideas discredited by a Revolution said to proceed from too much of them, moreover, few self-respecting members of a newly professionalized scientific community (except his one protégé, Geoffroy Saint-Hilaire) could risk attempting the lofty synthesis between zoology and philosophy on which he set his sights.

Nor did he win friends and influence people abroad. Charles Lyell was at once impressed and troubled by his theory of the transformation of species in the *Philosophie zoologique*, but Darwin – of whom Lamarck is still often alleged to be the main precursor on just this subject – claimed he had learnt nothing from him and ungraciously suspected him of having plagiarized the work of his grandfather. Even Cuvier's eulogy contrived to damn him with faint praise by charitably misdescribing his ideas so as to make them seem absurd. Almost the last surviving of a noble family, Lamarck, blind and penniless in 1824, was duly buried in a common grave.

His debts to Enlightenment philosophy and his divergences from Darwinism have been the subject of commentaries before, but Madeleine Barthélemy-Madaule's *Lamarck: the Mythical Precursor*, originally published in French in 1979, neatly grounds his divorce from the one in his betrothal to the other. On the one hand she shows how Lamarck's conception of a natural economy and the fundamental balance of life drew him progressively closer to a Linnaean picture of the Universe in which cosmic harmonies were responsible for each niche filled by the Earth's diverse flora and fauna.

In his account of the transformation of species, first conceived around 1800, Lamarck of course abandoned the First God of Creation to which both Linnaeus and Cuvier, as well as he himself had earlier adhered, and he also took issue with all teleological approaches to an understanding of Nature or life, insisting that Nature could be explained in mechanistic terms and life as a brute physical phenomenon. But he held fast to the idea of a perfectly rational order of things which joined living and inert matter in equilibrium, so that the providential God he unbrooked and cast off stage was replaced by a beatified vision of God's Nature, an ideologically overlaid "God of the Enlightenment" as the author puts it with a "sentimental" flourish. In the early 1930s, however, Imperial began to benefit from government's view that

Madaule shows how Lamarck's theory of the development of natural variation (including the inheritance of acquired characters) was conceived in a serial frame of reference wholly distinct from that of Darwin. Believing that the stability of plants and animals was proportional to the stability of their conditions of life he argued that change in environmental circumstances must alter needs to the same degree, which in turn must affect the use of organs and as a consequence prompt modifications in them, which, finally, could be transmitted to offspring indefinitely, leading to the transformation of species. For Darwin, however, variation was a function not of sequence but structures, in which organic changes – whose remote origins were in doubt – possessed different utilities for survival, with natural selection, by preserving advantageous change, accounting eventually for the origin of new species. Utility in Darwin's doctrine differs from use in Lamarck's in that it does not of itself give rise to the modification of organisms, so that what appears as a physiological postulate operating with respect to each phenotype in the one theory works in the other case only at the level of zoological populations.

These themes and others are taken up with much sophistication by

Barthélemy-Madaule, whose account is more clearly informed by an overarching conceptual framework than most studies of Lamarck, although it provides a less comprehensive and well-documented guide than Richard Burkhardt's *Spirit of System*. About Lamarck's pioneering and magisterial study of invertebrates, for instance – perhaps his most important work of all – she has relatively little to say. Her book is also of uneven quality, rather better on the contrast with Darwin than on the eighteenth-century background, but its main fault is its too frequent manner of identifying Lamarck's views by way of commentaries on other authorities. Such an approach ill befits an endeavour to locate his meaning in the ideological contexts of his own day rather than as a failed prefiguration of Darwin, and to that extent the work resembles a dissection performed under a periscope – unnecessarily oblique and stiff-necked, like a giraffe feasting on snails. Nor are readers as well served as they should be by this translation, which is full of extravagant gallicisms and more than a fair share of misprints.

Robert Wokler

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Imperial vision

Science for Industry: a short history of the Imperial College of Science and Technology and its antecedents by A. Rupert Hall
Imperial College of Science and Technology, £6.75 and £3.50
ISBN 0 85287 143 0 and 144 9

In 1907 the Imperial College of Science and Technology was established to promote advanced teaching and research in science, especially in its applications to industry throughout the empire. The college was also intended to create in South Kensington a unified and superior version of Charlottenburg, Berlin, where industrial research was carried on by two adjacent but separate institutions (the *Physikalisch-technische Reichsanstalt* and the technological university). At the same time Imperial was designed to exorcise the embarrassing spectre of the highly successful Imperial Engineering College at Tokyo.

The main burden of Professor Hall's demi-seculocentennial history is to show that this grandiose scheme was not easily implemented: time after time he reveals that intention was one thing, achievement another. From its inception Imperial faced formidable obstacles. Far from enjoying the advantages of being founded *de novo*, it was composed of three previously separate colleges which found it difficult to act as a harmonious trinity. Administratively at least seven public bodies handled the college's daily business, not surprisingly generating problems of authority. Inevitably there erupted the delicate question of the relation of the college to the University of London, a matter which was acrimoniously debated until the late 1920s when the college became a constituent institution of the university and its students could gain the coveted London degree.

Such difficulties hardly encouraged the various activities envisaged by the college's founders. Up to 1914 research was undistinguished, the level of teaching elementary, and the college generally derided by University and King's Colleges. From 1914 to 1950 the dream of a London Charlottenburg remained remote. Inward depression took its toll: by the early 1920s the college had lurched into deficit financing; and in the 1930s, even with the redoubtable Henry Tizard as Rector, the student population dropped steadily.

The spirit of postwar reconstruction did not animate the Centennial Appeal of 1945: its modest success indicated that in future the state, instead of propping up the college, would have to be state-inspired. However, Imperial began to benefit from government's view that

Improved technological education would promote increased industrial production. This economic concern motivated the college's jubilee expansion of buildings, costing £20,000,000 between 1953 and the mid-1970s. Ironically the London Charlottenburg at last arose when the imperial vision had long vanished and British industrial competitiveness was declining.

Hall tells his story with characteristic skill and zest, indulging in racy jokes about the horny-handed provinces. Though an emeritus professor of Imperial, he has clearly not succumbed to the temptation of writing hagiographic history. Given these virtues, it is a pity that Hall was presumably constrained by the genre of the short history. He offers few references, only a three-page table of principal officers. Some of the bibliography is not index. His text concentrates on such staples of institutional history as buildings, finance, administration, and vignettes of the leading staff. I would like to know more, however, about industrially sponsored or orientated research at the college and about the careers of its students in industry or elsewhere.

The centennial historian of Imperial will find Hall's book a good basis for research. At the same time he or she will surely draw heavily on the work of Lawrence Stone on the history of science, and on the statistical approach to archival material which Terry Shinn has exploited so well in his recent account of the *école polytechnique, Savoir Scientifique et Pouvoir Social* (Presses de la Fondation Nationale des Sciences Politiques, Paris, 1980).

J. B. Morrell

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Newton scholars

Contemporary Newtonian Research edited by Zee Becher
Reidel, Dfl 95
ISBN 90 277 1303 0

It is hard to know what this rather uncoordinated collection of essays is meant to achieve. For while the quality of the seven individual contributions is high, the theme that Newton's achievement. The point is made vividly in J. E. McGuire's learned account of the labyrinthine philosophical context of Newton's early attack on Cartesianian philosophy in his *De Gravitatione et Aëriopondio Fluidorum* (1686). It is one thing to make easy reference to Newton's immersion in the highly technical debates of his day on matter theory and the nature of space; it is quite another to venture, as McGuire does, on to the shifting



Napoleon visits the French countryside. Illustration taken from *The King's Garden*, an English translation of Marguerite Duval's history of botanical exploration and discovery, *La Planète des Fleurs*, published by the University Press of Virginia at \$14.95.

amid the detailed textual criticism of both manuscripts and printed sources in which modern Newtonian scholars excel.

As a contribution to what I take to be the main thrust of the volume, I. B. Cohen's very long paper (occupying over a third of the book) is clearly of special importance. For Cohen, the new concept that set Newton on the path to the discovery of universal gravity and gravitational celestial mechanics about 1680 was centripetal force. The concept, as he argues, had its roots not in alchemy (as Richard Westfall has proposed) but rather in the suggestive prompting of Hooke which were then creatively transformed in accordance with the unique "Newtonian style" of analysis.

It was this style which allowed Newton to sustain two distinct levels of discourse in the *Principia*: the mathematical (concerned with establishing a mental construct independent of reality) and the physical or experiential (in which Newton grappled with nature as perceived through the senses). Such an interpretation might be taken to imply that students of Newton's alchemical interests have been wasting their time. But even Cohen allows that Newton's ideas about forces in the years just before the publication of the *Principia* (1687) may have been "informed" by his alchemical background, and it would certainly seem that the alchemical roots of Newton's speculations on, for example, the ether as a cause of terrestrial gravity stand unimpaired.

Cohen's cautious observations on the relevance of alchemy are typical of many of the conclusions in this volume. It seems impossible, at present, to go beyond the most tentative statements about the sources for Newton's achievement. The point is made vividly in J. E. McGuire's learned account of the labyrinthine philosophical context of Newton's early attack on Cartesianian philosophy in his *De Gravitatione et Aëriopondio Fluidorum* (1686). It is one thing to make easy reference to Newton's immersion in the highly technical debates of his day on matter theory and the nature of space; it is quite another to venture, as McGuire does, on to the shifting

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Why Economists Disagree

The Political Economy of Economics

Ken Cole, John Cameron and Chris Edwards

Many people call themselves 'economists' and thus apparently accept some shared identity. It is obvious that there are major areas of disagreement between them and while they may agree on where they disagree, they will rarely agree on why. Students are aware of this situation, especially as it concerns current political and economic debates, and until now there has been no satisfactory explanation of it in standard courses and textbooks.

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BOOKS

ECONOMICS

Producing less

The Rise and Decline of Nations
by Mancur Olson
Yale University Press, £8.95
ISBN 0 300 02307 3
International Industrial Productivity
by A. D. Smith, D. Hitchens and S. W. Davies
Cambridge University Press, £13.50
ISBN 0 521 24901 5
Slower Growth in the Western World
edited by R. C. O. Matthews
Heinemann Educational, £14.50 and £6.50
ISBN 0 435 84515 2 and 84516 0

These three books collectively aim to shed more light on the fascinating questions of why levels of output per head differ so widely between industrial countries and why rates of growth of output per head vary between countries and over time. Individually they are concerned with different aspects of the questions; each adopts a rather different approach.

The most ambitious and original work is that of Mancur Olson who, drawing upon his *Logic of Collective Action* attempts to explain a wide variety of growth experience. The first third of the book sets out the analytical framework which is then put through a series of tests.

Olson's central argument is as follows. Modern societies consist of a large number and variety of special interest groups who supply collective goods to their members. As with the provision of all collective goods there is a free rider problem so these organizations usually offer selective incentives which may be positive (benefits such as legal protection which are only available to those who contribute) or negative (exclusion, disapproval). Small interest groups will often have the greatest power, or incentive to further the interests of their members, for two reasons. First, because in small groups the proportionate gain to the action of any one individual is greatest. Second, because a small group can gain by devoting resources to increasing their share of total output even if the result is a fall in total output. Large "encompassing" organizations, on the other hand, can only gain by measures which increase total output. All such organizations tend to make decisions slowly. Finally, the more stable and long established a society is the more likely it is to have a well developed system of special interest groups which will slow down the rate of growth.

Thus, to take an obvious example, the slow postwar growth of Britain relative to Japan and Germany may be attributable to the long-run social and political stability of the former whereas in the latter two countries many institutions started anew after the war (51 per cent of "associations" existing in Britain in 1971 were founded before 1939; in Germany the proportion was 24 per cent; in Japan 19 per cent). The argument implies that growth will slow down in the latter countries as stability promotes the growth of interest groups, although this effect may be modified by the fact that many organizations in these countries are "encompassing".

The analysis is applied to a wide range of other cases and holds up remarkably well. Resource-rich Australia and New Zealand grow slowly because unions and firms have obtained high levels of protection (which further promotes self-interest) for manufacturing; the sunbelt states of the United States grow faster than the older established manufacturing areas of the north-east; and so on. Inflation and unemployment (recent macroeconomic work has tended to emphasize the proposition that wage and price stickiness may lead to market-clearing and Olson's theory clearly predicts rigidities. For example, it may be in the interest of unions to resist wage adjustments and, more generally, the slow nature of decision-making in special interest groups slows down price and wage changes.

Olson has written a stimulating book to put alongside more traditional explanations of growth. As he points out, however, the literature on the sources of growth does not yield the ultimate source: if investment is the cause, it does not tell us why the investment did, or did not, occur.

Smith, Hitchens and Davies construct measures of the level of labour productivity in six non-service sectors of the British, American and German economies in the years 1968-77. Across all six sectors in 1977 productivity in the United States was about 2.7 times that in Britain, and in Germany it was about 1.4 times greater than in Britain. They find that, relative to these averages, agriculture and transport are good performers in Britain and extractive industries and public utilities do badly; relative performance in manufacturing is about the same as the average. A series of possible explanations of these productivity differences are tested in a simple statistical way and the only clear result to emerge is that, not surprisingly, low labour productivity is associated with low capital intensity. About one half of the book is devoted to explaining the measurement of sectoral productivity. Its main value will be to those wishing to use the resulting estimates.

Slower Growth in the Western World contains eight papers (with comments) presented to a conference held in mid-1982 together with a superb, succinct, summary by the editor. Comparing labour productivity growth in the period 1973-79 with that in 1961-73 all industrial countries experienced a slow-down of the order of 5 percentage

Who was first?

Anticipations of the General Theory?
and other essays on Keynes
by Don Patinkin
Blackwell, £15.00
ISBN 0 631 13156 6

Less than half of this volume is devoted to anticipations of Keynes's *General Theory of Employment, Interest and Money*. Four of the nine chapters are reproductions of previously published articles with some revisions and additions. The intention is that these self-contained, earlier writings by Patinkin on Keynesianism will provide background material for the original matter in part one, but the result is a volume which lacks cohesion. The first part, which has not appeared in print elsewhere and forms the core of the book, is based on a series of public lectures given at the University of Chicago in 1978 and deals with the simultaneous discovery of the *General Theory*.

Persistent depression and unemployment were common to all countries in the western world in the 1930s and since economics as a science in several of these countries was not basically different at the time, it would seem reasonable to expect a multiple "discovery" of Keynes's *General Theory*. Patinkin concerns himself with the possibility of independent discovery in different countries and examines the claims that have been made on behalf of the Stockholm School and the Polish economist, Michał Kalecki.

Patinkin starts by identifying the major innovative feature and central message of the *General Theory*. He emphasizes that the primary concern of the *General Theory* is theory rather than policy; that the primary concern of the theory is output and employment; and that the primary concern of the theory of output is the explanation of equilibrium in an economy at less than full employment. He sees the theory of effective demand as the central message which explained the unemployment equilibrium of the 1930s. Not only would the level of effective demand determine the level of output and employment in the economy but any decline in output would itself generate feedback effects which would ultimately eliminate the excess of supply over demand. Patinkin emphasizes that changes in output are the distinctive feature of the *General Theory*. A scientist, as properly he said to Patinkin, only if it is part of his central message. The central mes-

sage must be fully integrated into the scholar's conceptual framework and must be distinguished from the random component of his thinking. It must be announced early in the work and repeated regularly throughout.

In his assessment of the writings of Kalecki and the Stockholm school, Patinkin shows that their works do not contain the central message of the *General Theory*. His contention is that Kalecki is concerned with analysis not of output but of investment; not with a state of continued low-level employment but with forces that generate cycles of investment; and not with the feedback mechanism that equilibrates supply and demand via declines in output.

In analysing the relation between the theoretical writings of the Swedish economists and the *General Theory*, Patinkin explores the work of Wicksell, Lindahl, Myrdal, Ohlin and Lundberg. His findings show that their writings contain no recognition of what he has singled out as the novel central message: namely, the equilibrating role of changes in output. Wicksell, Lindahl and Ohlin are shown to have been primarily concerned with prices, not output.

Patinkin's assertion that the *General Theory* cannot be considered an instance of multiple discovery is challenged by many economists. Klein and Robinson claim that Kalecki undoubtedly anticipated the *General Theory* in his work. Shackle sees in Myrdal an independent discoverer while Stolger claims that both Myrdal and Ohlin anticipated the *General Theory*'s analysis. These differences of opinion can be partly explained by differing definitions of Keynes's central message. Klein and Robinson fail to incorporate the equilibrating role of changes in output within their definition while it is given priority by Patinkin.

However, another important reason for these differences of opinion concerns the distinction between the logical and chronological. Klein's contention about Kalecki is based on his claim that a system of equilibrium is equivalent to the *General Theory* can be constructed from Kalecki's writings. Patinkin's retort is that this does not mean that Kalecki himself perceived his system at the time. In the end, however, accepting Patinkin's conclusion that there was no multiple discovery of the *General Theory* requires acceptance of his very precise and subjective definition of the innovative feature of this theory.

James F. Bradley
James F. Bradley is lecturer in economics at Queen's University, Belfast.

BOOKS

ECONOMICS

Question marks

The Renaissance of the Scottish Economy?
by Charlotte Lythe and Madhav Majumdar
Allen & Unwin, £8.95
ISBN 0 04 339032 3

Devolution, like the poor, is always with us. Despite the defeat of the devolutionists in the 1979 referendum — much more emphatic in Wales, it has to be admitted, than in Scotland — two of the major political parties (treating the Alliance as one and, more questionably perhaps, as major) are once again approaching an election with a Scottish Assembly as a plank in their platform. In so far as political debate can be influenced by rational argument, therefore, the timing of the publication of this study of the political and economic structure of contemporary Scotland is well chosen.

The question-mark in the book's title is not mere affectation. It is meant to indicate the doubt which must legitimately be expressed concerning both elements in it: on the one hand, the existence, or otherwise, of a Scottish economy in the sense of a system which could be shaped and manipulated by internal (ie Scots) policies, independently of the English; and, on the other, the possibility, or otherwise, of a return to the relative affluence which Scotland in comparison with England appears to have enjoyed at the peak of the industrial revolution in the late nineteenth century. The advocates of devolution, and a fortiori of home rule, regard both elements as self-evident and appear genuinely to believe that a group of people in Edinburgh (or Cardiff or wherever) equipped with an assembly and the appropriate battalions of civil servants can legislate free haggis into existence. The message of this book is that both elements are, for all practical purposes, illusion.

This is not because the authors are (like some of us) cynical concerning the ability of political mechanisms or civil servants to increase the wealth-creating powers of society by the minutest fraction. Indeed, in its opening and concluding descriptive chapters the book suggests that on occasion the formidable battery of administrators which the Scots have endured for many a long year may have marginally improved the lot of their fellow-men. No positive evidence exists to support this proposition, of course; it is simply that it is not impossible that it might have been so, and the authors charitably give the administrators the benefit of the doubt.

But it is the four intervening chapters which do the damage. These set out in exhaustive — some might say exhausting — detail the facts, in so far as they can be discerned, of Scotland's economic structure and performance over the period 1954-79. Non-economists are likely to find these chapters hard going; in them the reader is confronted with 35 statistical tables and 13 graphs, most of them of roughly the consistency and digestibility of a railway time-table. The evidence is subjected to careful and ingenious analysis, although econometricians are likely to raise a few eyebrows at some of the methodology. Nevertheless it demonstrates beyond dispute the open nature of Scotland's economic structure, the dominating influence of the UK levels of prices, output and employment and the exceedingly close constraints within which any conceivable devolved government would inescapably be confined.

In a particularly valuable section the authors show that this is true not only of a devolved government but of so-called regional policy as a whole. Much recent work on British policy having a regional dimension has foolishly proceeded on the principle of *post hoc ergo propter hoc*, arguing that because the relative

position of the regions exhibited some improvement during the 1960s when regional policy was "active" the former was therefore caused by the latter. This book shows that the dominant influence behind both of the relatively high growth rate of the UK as a whole, or so-called regional policy has "worked", if at all, only when it was least necessary.

All this is well said. Although the volume is undoubtedly the most comprehensive and well-documented study to date of the economic structure of Scotland, I doubt if the political advocates of a Scottish Assembly will give it the study it merits. Certainly they will not like it; but this is only because they wrongly believe that the foundation of the case they are seeking to make is substantially economic, whereas in reality it is wholly political.

E. T. Nevin

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Reliving rivalry

The Oxford Economists in the Late Nineteenth Century
by Alon Kadish
Oxford University Press, £19.50
ISBN 0 19 821886 9

Alon Kadish has had the bright idea of identifying the members of the Oxford Economic Society in the years 1886 to 1891 and contrasting their views of economics with those of their Cambridge contemporaries. Of the 27 listed, I am acquainted with the work of only six (William Ashley, Sidney Ball, Edwin Cannan, L. L. Price, T. T. Hobhouse and Lewislyn Smith). I have, too, heard of W. A. S. Hewins, the first director of the London School of Economics, one of whose qualifications, according to Sidney Webb, was that "he was not a Cambridge orthodox person" — which meant that he was not Alfred Marshall nor one of his disciples.

Dr Kadish emphasizes the contrast in ethos of the two universities: in retrospect, the group which has study has dealt with offers an example of lateral scientific development expressed organizationally by the reorganization of the boundaries of political economy as an academic discipline. In its lifetime the group of Oxford economists was regarded as a school of thought in confrontation with the group referred to as the Marshalls.

With the exception of Cannan, the Oxford crowd were short of funds and came from working-class or impoverished middle-class families that were put under severe financial strain by the expense of their education. (Might this have accounted for their interest in economics and their belief in its importance?) They also shared a strong religious sentiment combined with radical liberalism. In the 1880s, this (ouped expression in the Extension Lectures that had a special appeal for Oxford's young economists, because they provided an opportunity to teach political economy and economic history, "as well as offering the challenge of realizing Toynbee's impassioned promise to England's working class. Toynbee had died in his thirty-first year, which imparted a special poignancy to his example of service).

There was, then, an evident conflict between Oxford's favoured political economy that would form part of a mission for the upliftment of mankind and the positive economics of Cambridge whose laws, in Marshall's words, "are statements of the mood, and not ethical precepts in the imperative". For Christians such as the young Oxford economists, the concept of Economic Man, whose motives are entirely selfish, would hardly have been worth bothering about.

Conflict became enshrined in 1891 with the publication of the first numbers of the *Economic Review* in Ox-

ford and the *Economic Journal* in Cambridge. Marshall had been working indefatigably for the liberation of economics from its dependence on history or statistics, and at the end of 1890, the British Economic Association was formed. According to Marshall's circular, "the Association, by way of the *Journal* would serve 'the advancement of economic knowledge' and through it a central core of economic science would develop". Marshall tried to prevent the launching of the *Economic Review*; having failed, he tried to persuade its sponsors to change its name to "The *Journal of Social Reform*". Oxford believed that Marshall wished to avoid competition (a strange motive to attribute to an orthodox economist); what he really sought was the projection of the image of a unified science. And his fears were confirmed: the first issue of the *Review* clearly rejected the positive notion of economics, advocating that a sharp line could not be drawn between the economic moralist and the scientific economist: the one must have clear knowledge of the facts, the other of the morals.

Despite these lively demonstrations of independence, Oxford economics languished while Cambridge economics advanced, its products filling a growing number of teaching posts in other universities. But Marshall did not enjoy the wholehearted support of his Cambridge contemporaries. William Cunningham, in particular, took the opportunity of his presidency of Section F in 1891 to compare the newly-published economic journals, and there clearly demonstrated the old differences between the two universities:

The intense interest which Oxford has always shown in the study of man and of conduct has put her practically in touch with many sides of actual life. . . . But in Cambridge we are so engrossed in the study of things that we have not time to spare for trying to know ourselves.

So man was regarded "as if he were a kind of thing" and the same methods applied to him as to physical phenomena. Herbert Foxwell's views, too, diverged from Marshall's. Both Cunningham and Foxwell moved to the London School of Economics, the one via King's, the other University College.

How is one to account for Marshall's triumph? He achieved, or almost achieved, for economics what the eugenics movement has attempted for religion, by accommodating in his work a great range of mutually-conflicting ideas, sufficiently removed from reality for the conflict to be obscured. Another reason for his success, perhaps, stems from his own position as the leader of the movement: as Dr Kadish remarks, one of the major problems facing the dissenters' camp, apart from the lack of organizational base, was lack of leadership. There was no figure of unquestioned professional authority in their camp who could bring unity and cohesion to their arguments and at the same time co-ordinate the struggle over academic recognition and the establishment of university posts.

The struggle was a continuation of that, waged so forcefully in earlier years by Thomas Cliffe Leslie against the "a priori deductive method" but the "historical" too seem to have been chasing shadows. Historical records could not provide the sort of data required for understanding economic activities; it was knowledge of the present that was required, and that was available if, and only if, the right research techniques were employed. These bright men had never left their universities and were innocent of experience of the business world; they were as Bagehot remarked: like "anatomists who had never dissected, astronomers who had never seen the stars".

Dr Kadish has given an impressive demonstration of the "historical" craft. By the immense patience of his search he has recreated the society of the 1880s and 1890s, in which economists assumed its modern form, so that one can relive the controversies of those days, and discover their curious resemblance to those of today.

Guy Routh
Dr Routh's forthcoming book is "Economics: an alternative text".

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C. J. Bliss and N. H. Stern

This study is an ambitious and systematic attempt to put to the test theories of underdevelopment and of the motives and behaviour of poor farmers in an Indian village. As well as reporting on the village, its population and institutions, the authors include a review of the development models on which they have drawn, modifying them where appropriate. £15

Oxford University Press

Basil Blackwell

The Economist as Preacher

GEORGE STIGLER

In these witty and provocative essays, the winner of the 1982 Nobel Prize for Economic Sciences and one of the world's foremost historians of economic thought has fresh and sensible things to say about the relationship between economics and ethics, the way the political environment is reflected in this highly mathematical social science. 268 pages, £15.00 (0 631 13235 X)

The Economics of Supply and Demand

LAWRENCE KLEIN

In this book, the 1980 Nobel Prize-winner, one of the leaders of modern macroeconomic modelling, makes a compelling case for the integration of supply and demand in economic analysis and policy. (May) 176 pages, £12.50 (0 631 13155 8)

Anticipations of the General Theory?

DON PATINKIN

This is the story of the circumstances that made the *General Theory* possible. Was it discovered simultaneously by several economists? What was the precise nature of the discoveries which led up to it? Why did they occur when and where they did? This major historical investigation sheds new light on a significant development. 308 pages, £17.00 (0 631 13156 6)

Monetarist, Keynesian and New Classical Economics

JEROME L. STEIN

Where once Keynesian theory reigned supreme, three competing schools now co-exist, each offering very different explanations for inflation, unemployment and the decline in growth. In this important new book, a well-known economist examines the hypotheses of each, using a general macrodynamic model. The results are startling and sure to stimulate further debate. 238 pages, £15.00 (0 631 12908 1)

New in paperback

The Political Economy of Taxation

Edited by ALAN PEACOCK and FRANCESCO FORTE

The book deserves a wide readership. *Times Higher Education Supplement* 224 pages, paperback £6.50 (0 631 13218 X)

The Politics and Philosophy of Economics

T. W. HUTCHISON

Admirable lucidity and skill. These are essays worth owning and returning to. *Times Literary Supplement* 320 pages, paperback £7.50 (0 631 13217 1)

Basil Blackwell Publisher, 108 Cowley Road, Oxford OX4 1JF

Polytechnics continued

Senior Lecturer 'A' in Home Economics

(Post Ref: 83/4)
£11,700 (x3)-£12,987 (Bar)
(x4)-£14,748

Applications are invited for the above post which is primarily concerned with the further development of the B.A. Degree course in Home Economics. In addition to being the Course Leader, the successful applicant will be expected to take advantage of opportunities available in research, consultancy and personal development. Further particulars and application forms are available from The Secretary and Treasurer (Staffing), The Queen's College, Glasgow, 1 Park Drive, Glasgow G3 6LP, or telephone 041-534 8141, Ext. 27. The closing date for this post is Monday, 14th March 1983.

THE QUEEN'S COLLEGE
GLASGOW
1 Park Drive, Glasgow, G3 6LP
Tel: 041-534 8141
A Scottish Central Institution.

TESSIDE POLYTECHNIC
DEPARTMENT OF ELECTRICAL, INSTRUMENTATION AND
CONTROL ENGINEERING
INFORMATION TECHNOLOGY INITIATIVE

The Department has recently received substantial government support for expanding its activities in Information Technology. The expansion will lead to increasing numbers of students on the BSc (Hons) in Computer Technology and to the opening of a new BSc (Hons) in Information Technology. The Department will also undertake the development of a new MSc in Information Technology of the Department of Computer Science.

The Computer Technology degree combines computer hardware and software engineering and includes some computer science and a research project. The new BSc (Hons) in Information Technology is a 3-year programme. The new MSc in Information Technology is a 1-year programme.

Candidates for the Senior Lecturer/Assistant Lecturer post should possess a good Honours degree in a field related to computer engineering and/or electronics, especially digital electronics. They should also possess a Higher Degree in a relevant area and should have several years of recent experience in a field of computing, preferably including microcomputer engineering applications.

Candidates for the Senior Lecturer/Assistant Lecturer post should possess a good Honours degree in one of the disciplines mentioned above. The successful applicant will be expected to contribute to the research and industrial consultancy activities of the Department.

DEPARTMENT OF COMPUTER SCIENCE

INFORMATION TECHNOLOGY INITIATIVE

Applications are invited for the post of:
Principal Lecturer and 2 Lecturer/Assistant Lecturer.
Candidates for the Principal Lecturer post should have a specialist interest in one or more aspects of Information Technology. The successful applicant will be expected to contribute to the teaching and/or development work of the department in one or more of the basic areas of computer science: computer systems, computer architecture, languages and compilers, programming, data processing or graphics.

Salary: £11,581-£13,280 (work bar) - £15,016 per annum. The salary on appointment will be no greater than £13,280 per annum.

Salary: £9,585-£10,173 (work bar) - £11,004 per annum. The salary on appointment will be no greater than £11,004 per annum.

Further particulars and application forms are obtainable from the Personnel Section, TESSIDE POLYTECHNIC, Borough Road, Lichfield, Staffs. B71 2SA. Tel: 0546 51231. Closing date for applications - 18 March 1983.

City of London
Polytechnic
Re-Advertisement
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DEPARTMENT
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Colleges of Technology



East Sussex County Council
HASTINGS COLLEGE OF
ARTS & TECHNOLOGY

HEAD OF
DEPARTMENT
Engineering and Science
(Grade V)

To start 1st September 1983. Full details and application form from the Principal, Hastings College of Arts & Technology, Archery Road, St. Leonards-on-Sea, East Sussex TN38 0HX. Tel: 0424 42387. Closing date for return of application forms Wednesday, 18th March 1983. Interview dates 20th/21st April, 1983.

Colleges and Departments of Art



SURREY
COUNTY COUNCIL

EPSOM SCHOOL OF ART AND DESIGN

Senior Lecturer
Department of Communication Design
September, 1983

to be Year Tutor to DATEC Higher Diploma Graphic Design students. A high degree of commitment and creativity are essential, together with relevant professional and teaching experience.

Current salary range: £10,404-£13,047 including Surrey Allowance (bar at £12,185)

Application forms from: Chief Administrative Officer's Secretary, Epsom School of Art and Design, Ashley Road, Epsom, Surrey, KT18 5BE. Tel: Epsom 28611.

Colleges of Higher Education



West Glamorgan
Institute of
Higher Education

Athrofa Goriawin Morgannwg
Senior Lecturer: Illustration

Applications are invited from suitably qualified candidates to be responsible for DATEC Diploma and Higher Diploma courses in Technical Illustration. The successful applicant should have graduate/professional qualifications and have the ability to manage a small team of specialist lecturers. He/she should also have a wide range of practical experience, and a teaching background would be an advantage.

Lecturer I: Illustration

Applications are invited from suitably qualified and experienced lecturers to teach on a wide range of courses in Illustration. The successful candidate will have a wide range of practical experience, and a teaching background would be an advantage.

Lecturer II: Nursing Studies
(Temporary for 3 years)

Applications are invited from suitably qualified and experienced Nurse Tutors to become Course Tutor for the Diploma in Nursing (validated by the University of Wales). The course is offered jointly with the School of Nursing in West Glamorgan and neighbouring Authorities and the successful candidate will have a permanent role to maintain liaison with all agencies. The person appointed will also be expected to teach on nursing theory and practice. A degree qualification would be an advantage.

Application forms and further details are available from the Principal, West Glamorgan Institute of Higher Education, Townhill Road, Swansea, SA2 0UT.

Closing date for applications: 11th March, 1983.

Robert Gordon's
Institute of Technology
Aberdeen
School of Mathematics
Computer Studies

SENIOR LECTURERS

Senior Lecturers (2 posts) to develop CNA degree courses in Computer Studies. The successful applicant will have a systems design and implementation project and/or extensive academic/practical experience in topics relating to software engineering, real time and expert systems. Developments envisaged will follow a strong technological bias with particular emphasis on practical aspects.

Good Honours degree in Computer Science/Computer Studies or allied discipline, or considerable industrial experience required.

Salary range: £11,700-£14,748 per annum.

LECTURER

Lecturer to teach programming, use of software packages and microcomputer systems. A wide range of courses interest in operating systems and/or graphics encouraged.

Good Honours degree in Computer Science/Computer Studies or allied discipline, or considerable industrial experience required.

Salary range: £7,956-£12,551 per annum.

Assistance with removal expenses.

Details from Secretary, Robert Gordon's Institute of Technology, Schoolhill, Aberdeen, AB9 1QS (0224 533611).

ilea Inner London
Education Authority

AVERY HILL COLLEGE
Bexley Road, Eltham SE9 2PQ. 01-850 0081

Vice-Principal (Academic)
from September 1983

Avery Hill College is a diversified College of Higher Education with a variety of degree and diploma courses, a substantial number of which are related to teacher education and validated by CNA.

The person appointed to this post will be responsible to the Principal for the overall management of the academic work of the College and, in particular, will be required to make a substantial contribution to the College's internal validation and evaluation procedures.

Salary £18,590 plus £834 Inner London Allowance (subject to formal approval). It is anticipated that the College will soon be upgraded to VI.

Further details and forms available from the Clerk to the Governors at the College, to whom completed forms should be returned by 18 March.

ILEA is an equal opportunities employer

WESTMINSTER COLLEGE
LECTURER IN MUSIC
(Lecturer II)

Applications are invited from suitably qualified candidates for the above appointment commencing September 1st, 1983. The College is seeking a widely interested and skilled musician to develop the musical life of the College in all its facets. The successful candidate will be responsible for designing and teaching the music courses offered in the Subsidiary Subject programme of the B.Ed., and the professional courses which are followed by B.Ed. (4-year Honours) and PGCE students.

Intending to teach in Junior or Middle schools. It is hoped to appoint a person with commitment to the development of music in the Junior school.

A contribution will be expected to the College's extensive in-service programme.

The closing date for receipt of completed applications is the 11th March, 1983 and it is hoped to shortlist by the 18th March, 1983.

Further particulars may be obtained from the Principal, Secretary, Westminster College, North Hinksey, Oxford O2 8AT (telephone number (0865) 247644) to whom applications, together with full curriculum vitae, and the names, addresses and telephone numbers of three referees should be sent.

Cheshire Education Committee
North Cheshire College

DEPUTY DIRECTOR
(GROUP 7)

Applications are invited for the above post which becomes vacant from 1st September, 1983 upon the retirement of the present post holder.

The College is a major provider of higher, further and community education.

Further particulars and forms of application may be obtained from the Director, North Cheshire College, Farnhead, Warrington WA2 0DB, and must be returned by 14th March 1983.

Christ Church College
of Higher Education
Canterbury
Department of Mathematics
and Computing

LECTURER II/
SENIOR LECTURER

Required for Autumn 1983. Lecturer II/Assistant Lecturer in the main with a specialism in Computing and Mathematics. Candidates should be highly motivated and be familiar with computer technology. Ability to teach Mathematics would be an advantage.

The college offers B.A., B.Sc. and M.Sc. degrees and higher degrees in Education.

Salary: Lecturer II/Assistant Lecturer £12,516 p.a.

For further details write to: Mr. J. Long, Lecturer in Computing, Christ Church College, Canterbury, Kent, CT1 3AG. Envelope to whom address should be sent as soon as possible and not later than 11 March.

The College of St Paul and St Mary
Cheltenham

Applications are invited for the following posts, which will be made on a permanent basis from 1 September 1983.

ART EDUCATION
MATHEMATICS
EDUCATION
RELIGIOUS
EDUCATION

To contribute to the degree courses

ENGLISH
GEOGRAPHY

Further information and forms of application may be obtained from the Principal, Secretary, The College of St Paul and St Mary, Cheltenham, Gloucestershire, GL50 2AA. Envelope to whom address should be sent as soon as possible and not later than 11 March.

REMINDER

Copy for
Classified Ads in the
THES
should arrive not later than
10a.m. Monday
preceding publication

Research & Studentships



The Science and Engineering Research Council has an answer:
Studentships for postgraduate conversion courses for up to one year.

They are for graduates in management and the arts, as well as science and engineering.

They will provide essential industrial or commercial training.

IT covers information acquisition, handling and use involving the latest technologies in micro-electronics, computing and telecommunications.

Applicants will need a good honours degree or an equivalent combination of qualifications and experience.

SERC's one-year studentship postgraduate conversion courses are part of an IT initiative promoted by the Department of Education and Science.

For details about SERC studentships contact:
Information Technology Studentships
Science and Engineering Research Council
Polaris House, North Star Avenue, SWINDON
SN2 1ET. Telephone: (0793) 26222
Ext 2137.

DES DES SERC

EMPLOYMENT
RESEARCHERS
NATIONAL CHILD
DEVELOPMENT STUDY:
ADULT STAGE

Experienced researchers are required to work on analysis and report-writing, following the recent completion of an interview survey of 12,500 members of the National Child Development Study at age 23. A substantial part of the interview concerned employment, unemployment, income, training and education, and it is specialist researchers in these areas which are now sought.

Two appointments will be made (full-time or part-time) at any of the following levels:

SENIOR RESEARCH OFFICER:
£10,425-£14,984 (incl. of London Weighting)

RESEARCH OFFICER:
£8,283-£10,527 (incl. of London Weighting)

RESEARCH ASSISTANT:
£5,213-£8,631 (incl. of London Weighting)

The people appointed should have experience which will enable them to work with detailed longitudinal data on employment, unemployment, income, education and training histories.

Successful applicants will join the existing multidisciplinary team responsible for all aspects of the project.

The appointments are to the end of 1984 in the first instance, and secondment from an existing employer is feasible.

Further particulars and application forms from: Peter Dowdall, National Children's Bureau, 8 Wakeley Street, London EC1V 7QE. Tel: 01-278 9441, Ext. 12.

University of
Edinburgh
SSRC
STUDENTSHIP

An SSRC studentship is available under the Collaborative Scheme (CASS) for postgraduate research in the field of Social Science. The successful candidate will be required to work with detailed longitudinal data on employment, unemployment, income, education and training histories.

Successful applicants will join the existing multidisciplinary team responsible for all aspects of the project.

The appointments are to the end of 1984 in the first instance, and secondment from an existing employer is feasible.

Further particulars and application forms from: Peter Dowdall, National Children's Bureau, 8 Wakeley Street, London EC1V 7QE. Tel: 01-278 9441, Ext. 12.

University of Wales
Lampeter
Saint David's
University College
S.S.R.C. CASS
STUDENTSHIP

Applications are invited for a CASS Studentship to study educational research in the field of Social Science. The successful candidate will be required to work with detailed longitudinal data on employment, unemployment, income, education and training histories.

Successful applicants will join the existing multidisciplinary team responsible for all aspects of the project.

The appointments are to the end of 1984 in the first instance, and secondment from an existing employer is feasible.

Further particulars and application forms from: Peter Dowdall, National Children's Bureau, 8 Wakeley Street, London EC1V 7QE. Tel: 01-278 9441, Ext. 12.

HEALTH
RESEARCHER
NATIONAL CHILD
DEVELOPMENT STUDY:
ADULT STAGE

An experienced researcher is required to work on analysis and report-writing, following the recent completion of an interview survey of 12,500 members of the National Child Development Study at age 23. A substantial part of the interview concerned health and use of health services, and it is a specialist researcher in this area which is now sought.

The appointment will be made according to qualifications and experience on the following scale:

RESEARCH OFFICER: £8,283-£10,527 (incl. of London Weighting)

For an exceptional candidate it may be possible to offer an appointment on the Senior Research Officer scale (£10,247-£14,864).

The person appointed should have relevant qualifications in, for example, medical sociology and experience which will enable them to work with detailed longitudinal data on physical measures, self-reported health status, medical histories and the use of services.

The successful applicant will join the existing multidisciplinary team responsible for all aspects of the project.

The appointment is to the end of 1984 in the first instance, and secondment from an existing employer is feasible.

Further particulars and application forms from: Linda Jenkins, National Children's Bureau, 8 Wakeley Street, London EC1V 7QE.

Administration

Department of Education & Science

HM Inspectors of Schools
Youth Service

Applications are invited from women and men, preferably aged between 35 and 45 with extensive experience of youth work and relevant professional or academic training. Experience in both statutory and voluntary sectors or in youth work training would be an advantage. All HM Inspectors undertake general duties as well as specialist work and candidates should, therefore, have a broad interest in other Schools or Higher and Further Education.

Starting salary within the range £13,840-£19,930 (up to £1,220 higher in London). Promotion prospects.

Applications forms (to be returned by 5th April, 1983) and further information may be obtained from Mr. E. D. Foster, Department of Education and Science, Room 18/17, Elizabeth House, 39 York Road, London SE1 7PL. Tel: 01-928 8222, Ext. 2237 or 2786. Please quote 1/83.

COUNCIL FOR NATIONAL ACADEMIC AWARDS
ASSISTANT REGISTRAR

Applications are invited for the above post which will carry no specific alignment of discipline based validation duties.

The principal work of an Assistant Registrar is the validation of degree and postgraduate courses in Polytechnics and other institutions of higher education. In addition to his or her validation work, the Assistant Registrar will be involved in the development of the Council's academic policy generally.

Candidates for the post should be well qualified academically and should have had appropriate teaching and/or professional experience.

The salary on appointment will be within the scale £11,112-£14,229 p.a. (merit bar £12,903 p.a.) including London Weighting.

Further particulars of the post may be obtained from: Assistant Secretary (Personnel), CNA, 344-364 Gray's Inn Road, London WC1X 8BP. Tel: 01-278 4411, to whom applications giving details of qualifications and experience and the names and addresses of two referees should be submitted by 14 March 1983.

Overseas

KING SAUD UNIVERSITY
(FORMERLY UNIVERSITY OF RIYADH)

Applications are invited from:-

1.) EFL/ESL LANGUAGE INSTRUCT

Overseas continued



University of Bophuthatswana

Resource Centre

Micro-Teaching Specialist

Applications are invited for the post of Micro-teaching Specialist which exists at the Mmabatho Campus of this University. An Honours degree plus University Education Diploma or Bachelor of Education degree with experience in micro-teaching is required.

Duties of the post include the administration and the full integration of the Micro-teaching Unit into the teaching-learning framework of the University, and evaluating the effectiveness of the micro-teaching techniques employed.

Salary scale: R12 657 x 780 - 18 557 x 936 - 22 173

Assumption of duty: As soon as possible.

Fringe benefits include, inter alia, pension and medical aid funds, group life insurance scheme, assistance towards accommodation, 13th cheque, passages for appointee and family, and removal allowance.

Applications should be accompanied by certified copies of academic qualifications, a detailed Curriculum Vitae, as well as the names of at least two professional referees.

Applications should reach the Registrar, University of Bophuthatswana, Private Bag X2046, Mafikeng, Republic of Bophuthatswana, Southern Africa, before 18 March 1983.

FEDERAL UNIVERSITY OF TECHNOLOGY MAKURDI, NIGERIA

Applications are invited from suitably qualified candidates for the following vacancies:

School of Engineering
Professors, Readers, Senior Lecturers, Assistant Lecturers in:
Electronic and Communication Engineering
Electrical Engineering and Design
Metallurgy and Materials Engineering
Production Engineering and Design
Agricultural Engineering

School of Foundation Studies
Lecturers and I, Assistant Lecturers in:
Chemistry - Organic/Organic Metalls
Physics - Heat, Light, Sound Electricity, Mechanics
Mathematics and Computing - Engineering Maths, Statistics, Computing

School of Agricultural Technology
Professors, Senior Lecturers, Lecturers in:
Livestock (Animal Science)
Agricultural Mechanisation
Crops
Food Science Technology
Botany of Management
Plant Physiology - Fish Production

Salary Scales
Professor US\$ 18 N14,290-N15,720
Reader US\$ 14 N12,792-N15,572
Senior Lecturer US\$ 13 N11,884-N14,820
Lecturer I US\$ 11 N9,000-N10,080
Lecturer II US\$ 9 N7,820-N9,040
Assistant Lecturer US\$ 8 N6,535-N7,498

Note: NE = \$564p approximately.

Conditions of Service
Appointments on permanent and pensionable terms (subject to probationary period) and on renewable two-yearly contract terms for probationary period with a contract addition of 25% of basic salary. Fringe benefits include air passages for self and family (up to 5 children), park-hotel accommodation, car, basic allowance, leave allowance, free medical and dental treatment.

Method of application
Candidates please submit all typewritten copies of application including full curriculum vitae, giving the names of three referees to write directly to:

The Director, Nigerian Universities Office, 180 Tottenham Court Road, London W1P 9LE
to whom applications should be sent by 31st March, 1983, and from whom further particulars may be obtained.

Senior Lecturer and Lecturer in Laws

The posts are available for one to three years commencing September 1983 and are renewable.
The location is a newly established University campus in Nigeria (near the College of Law, now in its second year). Good remuneration and pension benefits in kind.

Full details are available from:
The Secretary,
The College of Law,
Babagana Street, Lagos 201, 202
Telephone 01-224,6150

Translators Brussels or Luxembourg

The Commission of the European Communities is organising an open competition, based on qualifications and tests, to constitute a reserve of translators of Danish, Dutch, English, French, German and Italian.

Candidates, male or female, must:

- have perfect command of one of these languages and a very extensive knowledge of two other official Community languages (the linguistic combinations are specified in the notice of open competition)
- have a university degree in modern languages, and at least one year's post-university experience as a translator or terminologist or a university degree in a subject other than languages together with at least one year's professional post-university experience requiring an excellent knowledge of languages
- be nationals of one of the Member States of the Communities
- have been born after 28 February 1948.

The obligatory application form together with the notice of open competition can be obtained by writing, preferably on a postcard, to:

Information Office of the European Communities
20 Kensington Palace Gardens, London W8 4QQ
4 Cathedral Road, Cardiff CF1 9SG.

7 Alva Street, Edinburgh EH2 4PH
Windsor House, 9-15 Bedford Street, Belfast BT2 7EG.

Commission of the European Communities
Recruitment Division, 200 rue de la Loi, B-1049 Brussels.
Please quote reference: COM/LA/181.

Closing date for receipt of completed applications: 31st March 1983.

The Commission of the European Communities

UNIVERSITY COLLEGE OF BAHRAIN

University College of Arts, Science and Education, Bahrain, invites applications for academic posts at various levels in the following areas of specialisation:

Arabic: Syntax and Morphology - Linguistics - Comparative Literature - Folk Literature.
Islamic Studies: Philosophy and Sufism - Shari'a - Al-Tafar and Al-Hadith - Koranic Studies.

Biology: Marine Biology - Genetics (especially modern molecular genetics) - Invertebrate Zoology (with experience in entomology and parasitology).
Chemistry: Analytical Chemistry.

Education: Educational Foundations - Educational Technology - Curriculum Development - Educational Planning - Educational Administration - Children's Literature - Methods of Teaching at Primary and/or Secondary Levels: Arabic and Islamic Studies, Science, Mathematics, Fine Arts.
General Studies: Modern History - Human Geography - Sociology - Art Education.

Physical Education: Kinesiology and Biomechanics - Track and Field - Fencing - Dance, Expressive Movement, etc. (for girls) - Aquatics and Water Safety Instruction (for boys).
Adopted Physical Education for the Disabled (including posture analysis and remedial experiences).

Physics: Electronics - Astrophysics/Theoretical Physics.
Psychology: Educational Psychology - Learning and Memory - Child Psychology and Adjustment, Human Abilities and Traits - Statistics and Measurement in Education and Psychology.

English: ESL/EFL/ESP - Methods of Teaching English at Primary and/or Secondary Levels.
Library: Library Administration - Library Science.

Applicants in the specialisations listed under Arabic, Islamic Studies, Education, General Studies, Physical Education and Psychology MUST be Arabic speaking. The remaining areas are taught mainly in English. All applicants MUST be holders of a Ph.D. or equivalent research degree from a recognised university and have suitable university teaching experience. The contract will be for two years renewable and offers the following benefits:

Suitable accommodation - free medical services within the State system for the appointee and dependent family - economy air tickets for the appointee, spouse and up to 3 dependent children under 18 years of age, for travel to and from Bahrain, including summer vacation - one additional month's salary for each year completed at UOB - allowance for shipment of personal effects, etc.

Salary scales for various academic ranks as follows:

Professor BD 980 per month with 8 steps of BD 50 each
Associate Professor BD 775 per month with 8 steps of BD 25 each

Assistant Professor BD 675 per month with 8 steps of BD 25 each
One Bahraini Dinar = B.D. \$1.70; US\$2.05 approx. There is no income tax in Bahrain.

Applications should be addressed to The Rector, University College of Bahrain, P.O. Box 1063, Bahrain, giving three referees and passport details of wife and family. Deadline for receipt of applications: 31st March 1983.

KUWAIT UNIVERSITY OF KUWAIT Faculty of Medicine ENGLISH LANGUAGE INSTRUCTORS

Applications are invited for several posts of Instructor to teach English language and study skills courses to medical students and paramedical students. The posts will be tenable from September, 1983.

Applicants must be native speakers of English holding a master's degree, preferably in TEFL or Applied Linguistics, and with a minimum of three years teaching experience. Applicants with a master's degree in other fields together with a postgraduate diploma and teaching experience in TEFL or Applied Linguistics will also be considered.

Salary will be in the range KD 300-360 per month plus KD 42-53 professional allowance according to the number of years of EFL experience. (KD 1 = \$2.2 U.S. \$3.4, approx.) There is no income tax in Kuwait and currency is transferable without restriction. Free, furnished, air-conditioned accommodation is provided, and water and electricity supplied free of charge. Contracts are for one year, renewable by mutual agreement.

Holidays include approximately 10 weeks summer leave, two weeks mid-year break, and other official holidays as they arise. Annual economy class return air tickets to the country of citizenship or permanent residence are provided for the appointee, spouse and up to three dependent children under the age of twenty. Free medical treatment is available under the State Health Service.

Applications should be submitted to:
Dr. E. F. Chaplin, Director,
English Language Division, Faculty of Medicine

UNIVERSITY OF KUWAIT P.O. BOX 24923 Safat, KUWAIT

With detailed curriculum vitae, and the names of three referees, to arrive not later than March 25. Interviews will be held in London in the last week of April.

Overseas continued



UNIVERSITY OF CAPE TOWN

Senior Lecturer in Economic History

Applications are invited from suitably qualified persons for the above post, vacant from 1 July 1983.

Formal training in Economic History as well as cognate disciplines such as Economics will be an advantage. Economic historians well qualified in a broad range of fields will be considered.

Special interest and qualifications in African Economic History and South African Economic History will be a recommendation but the successful candidate will also be expected to teach courses in the field of other areas, of both undergraduate and postgraduate level.

Appointment will be made as soon as possible, according to qualifications and experience, on the salary scale R18 557 x 936 - R24 045 per annum. In addition a service bonus of nearly one month's salary is payable annually.

Staff benefits include 75% remission of tuition fees for dependants at UOT, generous research leave privileges, a housing subsidy scheme subject to State regulations, pension fund, medical aid and group life insurance schemes.

Applicants should submit a curriculum vitae stating present salary, teaching experience, qualifications, research interests and publications, and the names and addresses of three referees whom the University may approach.

Further information may be obtained either from Miss J. Lloyd, SA Universities Office, Chichester House, 278 High Holborn, London WC2N 7HE, or from the Registrar (Attention: Appointments Office), University of Cape Town, Private Bag, Rondebosch, 7700, South Africa, by whom applications (quoting ref. no. 5/34) must be received not later than 31 March 1983.

The University's policy is not to discriminate on the grounds of sex, race or religion.

Further information on the implementation of this policy is obtainable on request.

THE NEW SOUTH WALES INSTITUTE OF TECHNOLOGY FACULTY OF BUSINESS STUDIES SCHOOL OF ACCOUNTING

Principal Lecturer in Accounting

The School of Accounting provides undergraduate education for persons seeking vocational skills in accounting through a broadly based business degree with a strong core of accounting and finance. It also provides graduate programs for mid-career functional managers who are seeking to upgrade and update their existing skills. Further development of faculty graduate work will involve the school in general management programs. Three broad disciplinary areas are presently identified - Financial Accounting and Auditing, Management Accounting and Systems, and Business Law.

The successful applicant will be required to provide academic leadership and administrative assistance and, possibly, a number of challenging projects in various stages of development. These include a Computerized Accounting Laboratory, introduction of Hands-on EDP Audit Courses, and the introduction of an industrial year in the Undergraduate Accounting Program. Disciplinary interests are required either in Financial Accounting and Auditing, or Management Accounting and Systems.

Applicants should have a Higher Degree and an appropriate mix of teaching experience and practical experience in business or government. Evidence of research ability to give strong academic leadership probably through performance in applied research and writing in an appropriate form.

Applications should be forwarded to reach the Institute by 31st March, 1983, and should include full details of academic and professional work. The names and addresses of three referees, from whom confidential reports may be obtained, should be included. Applications should be addressed to:

The Director, New South Wales Government Office,
68 The Strand, London WC2N 8LZ.

The President of the New South Wales Institute of Technology will be in London during the first week in April and applicants who are shortlisted may be interviewed then.

AUSTRALIA ROYAL MELBOURNE INSTITUTE OF TECHNOLOGY LIMITED

PRINCIPAL LECTURER IN ACCOUNTING

DEPARTMENT OF ACCOUNTANCY STUDIES

Applicants should possess an appropriate degree with major studies in accountancy and preferably have a higher degree and should be a member of at least one professional accountancy body. The successful candidate will be expected to have a significant period of relevant industrial experience.

The position is tenured.

Salary \$40,000 p.a.
A salary scale should be obtained from Staff Branch, RMIT, P.O. Box 2474V, P.O. Melbourne 3001, Australia. Applications quoting Ref. No. 16142/N to the Staff Office by 31st March, 1983.

FEDERAL UNIVERSITY OF TECHNOLOGY BAUCHI, NIGERIA

Applications are invited from suitably qualified persons for the following posts in the University Engineering Training Workshops.

Chief Technologist
Assistant Chief Technologist
Principal Technologist
Senior Technologist

Duties:

Applicants will be expected to be able to work competently in two or more of the following workshop practice areas, general machining (either in wood or metal), fitting, welding, fabrication and sheet metal work, electrical technology, carpentry and joinery and engineering drawing. In addition, applicants may be required to serve as instructors to trainees in the workshops and to students. For the post of Chief Technologist and Assistant Chief Technologist, applicants will be expected to be capable of installing workshop equipment, five machine tools and welding sets in a prototype Industrial Training Unit. Appointees will be responsible to the Professor of Mechanical Engineering or the Director of Centre for Industrial Studies as appropriate.

Qualifications:

A minimum of full Technological Certificate in Workshop Practice together with several years of experience either in an Industrial Training Unit, Industry or Education. The possession of the Technician Engineer Certificate will be an advantage in all cases and especially for the posts of Chief Technologist where applicants must have had at least ten years' experience.

Salaries:

Chief Technologist - N11,384 - N13,092
Assistant Chief Technologist - N10,822 - N11,352
Principal Technologist - N5,000 - N10,500
Senior Technologist - N7,560 - N8,400

Note: N1 = \$564p approximately

Conditions:

Appointment is either permanent full retiring age, subject to confirmation after three years of service or on two-yearly contract or on confirmation from other institutions for a mutually agreed period. Economy class air or first class sea passage paid for appointee, wife and up to five dependent children on appointment, and at the end of each contract period. Park-hotel accommodation provided by the University at rentals not exceeding 8 1/2% of basic salary, or rent allowance at the rate of 20% of basic salary is payable to entitled staff in lieu of partly furnished quarters. There is a contract addition of 25% in respect of contract appointments, 10% payable with monthly salary and 15% at the end of the contract.

Method of Applying:

Each application should include candidate's curriculum vitae as follows: names in full, place and date of birth, home address, present postal address, nationality at birth, present nationality, marital status, number and ages of children, secondary and post-secondary education (including dates and institutions), academic and professional qualifications including distinctions with dates, statement of experience including full details of former and present posts, other activities outside current employment, names and addresses of three referees and proposed date of availability for duties if appointed. In addition to stating the names and addresses of three referees, applicants should request their referees to forward references on their behalf direct to the Director, Nigerian Universities Office, 180 Tottenham Court Road, London W1, to whom applications should also be forwarded by 31st March, 1983.

Librarians

Director of the National Sound Archive (British Institute of Recorded Sound) £16,275-£19,725

The Archive becomes a Department of the British Library with its own Advisory Committee on 1st April, 1983. It is the recognised national archive of sound recordings, including music (both European and non-European), literature and drama, speeches, historical events and wildlife sounds and is one of the most comprehensive in the world. There are 28 full-time staff.

The person appointed to this newly created post will be expected to plan and direct the extension and improvement of the Department's services, as well as to maintain existing activities and standards. The Director will represent the Archive publicly and must be able to liaise with senior staff in public and private organisations.

Candidates (preferably aged under 55) must have managerial experience in a relevant field and a broad knowledge of the world of recorded sound.

Salary as Director Grade B within the quoted range according to qualifications and experience.

For further information and an application form (to be returned by 18th March, 1983) write to Civil Service Commission, Alnwick Link, Basingstoke, Hants RG21 1JB, or telephone Basingstoke (0256) 68681 (answering service operates outside office hours). Please quote ref: G/5942.



Courses

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University of Essex M.A. IN SOCIAL HISTORY

A full-time (one year) or part-time (two year) degree, with both taught courses and research, and methods in social history, and an individual dissertation, offered by the Department of History. It is jointly with the Department of Geography and the Department of Sociology and Anthropology, for urban and rural history, for women's history, and for using oral history.

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All enquiries should be sent to the Departmental Assistant, Department of History, University of Essex, Colchester CO1 3SQ.

General Vacancies

North of England Institute for Christian Education ASSISTANT DIRECTOR

This independent, ecumenical Institute is engaged in research and projects in the area of Christian education and the further education of those with a responsibility for teaching the Christian faith. An Assistant Director will be appointed for September 1983 at a salary up to £8,510. Further particulars are available from the Director, North of England Institute for Christian Education, University of Durham, School Road, Durham, Co. 17A, (0688) 1085. Applications should be received by 24 March 1983.

THES Special Features 1983

March

25 Management Education
(Association of Teachers of
Management 28-30
March)

June

10 Reviews of New
Journals in the Humanities
and Social Sciences
17 Computers in Higher
Education

July

1 Education for
Employment

Aug

12 Feature to
commemorate the 13th
Commonwealth
Universities Congress at
Birmingham (14-20 Aug.)

Sept

16 Reviews of New
Journals in the Sciences

Don's diary

I feel odd in shorts. Odder still to look at (say my children). A bit like a Michelin man with bare legs. Still, it is 80° outside - and inside at that matter. A month in Jamaica to work on a new edition of my first book: 15 years since my first visit. I forget lots these days, including just how spectacularly beautiful this troubled island is. I'm in the middle, on the only thriving sugar estate - a luxuriant valley, deep in ripe sugar cane and rimmed by encircling mountains. But let me record two highlights of last week. Jimmy Young on the plane, greatly reassured to find he's no taller than me. T.T.F.N. And with Laurie Taylor. I'm clearly upwardly mobile.

A good first week on estate papers trying to disentangle the miserable recent history of sugar. The tropics impose their own routine. Brilliant early morning sun dictate early starts - which suit my normal routine; then lunch and siesta, and afternoon work. Then the round of drinks and dinner. It's a bit like dog-days, bumping into the same people at different angles. End the week meeting the family, here for two weeks, then to friends on the coast, their house perched above perfect beach. Five hundred yards out, the surf breaks colour from light to dark blue. Even my younger son seems impressed.

Spend the week compiling statistical tables and graphs: a data bank for next week's writing. My family are busy relaxing and enjoying themselves, so I press on uninterrupted and by Jimmy. I have an outline, chapter, ready. Break to enjoy the elaborate celebrations and feasting on my seventh Jamaican Xmas. We eat to the inappropriate croning of "Jack Frost nipping at your nose". "White Xmas" and other such tropical sentiments.

Xmas to New Year. Write up the material culled in the last two weeks. And it makes depressing reading. Faced now with two jobs - I dislike editing down and typing up. On New Year's Eve, I dispatch my family on the London plane and head back for seaside celebrations. Thought I was the worst dancer in the Caribbean until I was assaulted by another Englishman even more graceless and uncoordinated than myself. New Year comes in on a flawless night and we go for a less-than-sober midnight swim. A wonderful sensation.

In danger of going grey



Timothy Healy

During this session the Congress will discuss how the nation's mandatory retirement age from 70 to 80 is being challenged. The Congress will also discuss the need to protect America's aging social security system. The Congress of the American Association of University Professors is meeting in Washington, D.C. on February 25-27. The Congress will discuss the need to protect America's aging social security system. The Congress will also discuss the need to protect America's aging social security system.

quite unlike Blackpool south shore. End the week celebrating my birthday, at a party thrown for a one year-old, a five-year-old - and me. They had the grace to decorate my cake with Roman numerals.

Re-reading what I have recalled so far, it gives little impression of work: to re-assure myself, and both my readers, let me repeat - I have worked hard. There are 15,000 words in the book. But they will be blizzed by my co-author who manages to reduce my tight crisp prose to something approaching literary anorexia.

I did not take long to get down to the routines I love best and which, now, I simply can't abandon. Here, and at home, I begin early each morning with a blank sheet - and try to write till noon. And always, try same quirks and foibles surface; date in the top left hand corner; footnotes written at the bottom, working upwards (and therefore, if you follow backwards) till they bump into the advancing text. With a first draft finished I then render my illegible writing utterly indecipherable by deletions, transpositions and corrections. Then I type. But of course, since no one else can read it, I have to type my own manuscripts - though at this state the actual writing is finished and I am itching to start writing again. Then the hand-written draft is added to the neat pile of drafts I have accumulated since my first thesis in 1966. In fact every single sheet I have ever written now forms a pile, learning against my filing cabinet.

Finished! My chapter is down to size: the tables, graphs, and appendices - in plain - no special initiatives. As I time and hone the chapter, a poor young man comes to have me correct his uncut diamond of a letter (to my co-author). We befriended him when he was a small boy playing in our garden. I persuade him to leave his letter as it is. He persuades me to give him my watch. I have given two shirts and running shoes (in which, of course I have never actually run) to his friend. My radio's promised to the maid. My worldly goods are disappearing fast. If you see what looks like a distressed academic at Heathrow and only in underclothes and raincoat, kindly put me on the York train.

James Walvin

The author is reader in history at the University of York.

Does life hold any more surprises? What would one read if one had more time? When I retire I will really read all of Kant and Hegel and great classic novels that somehow one never got around to, like... I would be ashamed to name names, not having read everything, unlike those calmly omniscient Celtic beings who present or appear in *Kaleidoscope or Bookshelf*.

But perhaps it may never happen. When I was eleven, I was sure that the future held employment and with it the capacity to buy endless quantities of off-ratio sweets; but when the time came, sadly the taste had gone.

So perhaps I will never read Tolstoy, finish Dickens, sample Anthony Burgess, meet Bernard Levin, tour Greece or set out as if for Bayreuth.

However, life does hold surprises. For one Saturday night, finding that Pinter tickets at the National weren't available for love, money or influence, I asked our secretary (it's not true that some habits of business efficiency don't penetrate academia) "to try the RSC, whatever's going." "Anything! Don't you know what's on?" "It is bound to be Shakespeare. Oh, it's *Winter's Tale* or something else." "All's well that ends well," she told me later as I put my tenpence into the company telephone tin.

Who can ever remember which play goes with which title? Much *Ado About Nothing*, *Love's Labour's Lost*, *Brave New World*, *As You Like It*, *All's Well That Ends Well*, *The Magic Mountain*, *The Comedy of Errors*, *Spring Awakening*, *Measure for Measure* and *Two Gentlemen of Verona*. I suspect that even my colleagues in English have to glance at their notes occasionally. I'm only really secure about *The Merry Wives of Windsor*, *Twelfth Night* and *The Taming of the Shrew*. So what a fun to see, and at my age, a major Shakespeare play for the first time! And not to have a clue what was going to happen next!

The uncertainty was the deeply marvellous thing. It is not often that the wonder of the stage can be asserted against prior knowledge of the text. No wonder God wished that Eve had not eaten the apple. Biting it ended spontaneity and delight and led to universities and the Dewey Decimal system.

Teaching Shakespeare too early in the schools kills him in the theatre. I've often thought that Hamlet would work better as a drama and not need such desperate over-elaborating if only one didn't know that the ghost was a good ghost and not "a spirit of damned hell". After all, it is not until deep into the play that one hears Claudius confessing and knows that Hamlet is a noble tyrannicide and not a crazy, jealous would-be murderer. How sad that we know that the play will "catch the conscience of the king". I would love to have been there on the first afternoon.

Helena, the orphaned daughter of a poor physician, has been adopted by

After all, the play's the thing



Bernard Crick

the Countess of Rossillion. The countess's son, Bertram, with whom Helena is secretly in love, leaves Rossillion to serve at the French court. The King of France is gravely ill and Helena journeys to the court to try and cure him with one of her father's remedies. When the king recovers he offers to grant her a boon - Helena asks for Bertram in marriage and the king consents.

Bertram, however, is outraged at being commanded to marry a commoner. He goes through with the ceremony but swears he will not accept Helena as his wife until she performs the impossible - to wear his ring and conceive his child, neither of which he will ever give her. He immediately sets off for the wars in Italy with his companion Parolles. Helena follows him to Florence disguised as a pilgrim, and learning of his passion for a local girl, Diana, substitutes herself in Bertram's bed and obtains his ring as a pledge. The boasting Parolles is caught in a trap laid by his doubling comrades. He is exposed as a coward and no gentleman. Believing Helena to be dead, Bertram, triumphant in the war, returns to Rossillion where he is confronted by Helena, who is pregnant and wearing his ring.

That is a good summary, from the RSC's programme - a helpful one, for it is assumed both that few people know what the plot is about (like an opera programme) and that it is a difficult play. In one sense, it is not a difficult play, as presented, as Trevor Nunn did, as a fairy story, a strange, and rich, mythic fiction which cannot be reduced to naturalistic terms or given plausible psychologies for the leading characters.

Initially I shuddered when I saw the costumes were *Empire* as they had been four years ago for *Lear*.

brilliant symbols of autocracy in the early scenes, hopelessly specific and cumbersome in the anguished metaphysical scenes that step out of time and space (was I the only person who couldn't take seriously Sweden's *Lear* on the health in combination and poor Cordelia returning in a khaki uniform with bandolier). But this time it worked, or rather it really didn't matter so long as the costumes conveyed the high style of a court and a Kuratlian or Illyrian Never-Never Land. The old characters all radiated benevolence. Isn't it the only Shakespeare play in which this is so? Whereas the younger generation, headed by Bertram, are all brash, not fully formed, threatening (in the eyes of both king, the countess and their closest companions) to become arrogant, careless of human values. The young are courtiers, nowhere near as yet corruption and wickedness (as in the old ballad, once again "The Old Courtier and the New"), but men on the make none the less.

Bertram's companion, Parolles, is the only wicked young character - Falstaff turned sour even before the big belly grows. Only the older generation radiate, if apprehensively, benevolence and magnanimity.

The play is difficult, however, the plot suggests, in the character of Helena. Harriet Walter plays her beautifully and convincingly as a fairy princess, a Cinderella who is a man's wife, but not strident, full of true love, benevolence like the elders, and constancy of purpose: a triumphant assertion that women can shape events as much as men. The substitution of herself in Bertram's bed is made apt to the play and mythic rather than true to life, so coarseness or shock, only gentle, clever, table-turning persistence.

Yet it could all be played very differently: a person of iron will, more often associated in the past and elsewhere with a roguish male libido, someone who hunts down her man and gains revenge, a comic version of "normal" male values suddenly ceases to be funny, that woman, the revenger's black comedy, she throws the tamer tamed. After all, at the end, the king's full complement, following Bertram's repentance and declaration of love, is: "All yet seems well, and if it end as well, it will be a good end."

The bitter past, more welcome in the sweet.

"Seems well," my lords, and "it will end so sweet," my ladies. There is much ground for expecting trouble ahead between the sexes as they go. The great reconciliation scene will last forever. Is it "they all lived happily ever after" or a more Brecht-like "happy ending to our story, but in real life...?" Either is possible. It makes a good play, even a great play. Especially if one comes to it without preconceptions and leaves thoughtful and a little disturbed, as well as delighted. Then reading the text (instead of the Sunday papers) afterwards and not before.

Turkish dismissals

Sir, - You report (*THE*, February 18) that 200 Turkish university teachers have been dismissed during the present academic year. It is clear that a political purge is under way, and that the Turkish military authorities are systematically eliminating university autonomy and academic freedom. Many more Turkish academics are being intimidated into resigning their posts (under threat of dismissal and loss of pension). And others, like the economist Dr Yasin Kucuk, have been imprisoned by the martial law authorities.

An attempt is now being made to enlist the support of British universities for this policy of repression. At the invitation of the British Council in London, two representatives of the authoritarian Turkish university system are currently making a tour of British universities and research institutes. They are the directors of the institutes of physical and social sciences at Middle East Technical University, Ankara: Dr Kemal Guruz and Dr Yahya Tezel.

Dr Guruz and Dr Tezel have emerged as key figures in the policy of imposing military controls on the Turkish universities. They represent (in the words of a British Council document) the "firm policy line dictated by the Turkish higher education council". The higher education council is directly responsible for the policy of dismissing university teachers who do not support the military regime.

It is surprising that the British Council appears to be supporting these repressive policies by inviting Dr Guruz and Dr Tezel to Britain. But the aim of their visit is even more sinister. It is to recruit the members of the British Council's "Identified Individuals" (in Britain) who would be prepared to lecture for short periods at Middle East Technical University. In short: to recruit blackleg labour to replace Turkish university teachers who have been summarily dismissed.

Under normal circumstances, one would welcome cooperation between British and Turkish universities (I myself have been a visiting lecturer in Ankara). But the circumstances are not normal. What is happening in Turkey bears a sinister resemblance to the *Gleichschaltung* of German universities in the 1930s.

May I urge members of British universities to express their opposition to these policies by writing to the British Council, 10 Spring Gardens, London SW1, and to the Turkish Ambassador, 43 Belgrave Square, London SW1. Yours sincerely, E. F. TIMMS, Gonville and Caius College, Cambridge.

Legal training

Sir, - Mr Robert Elliot (*THE*, February 11) has some harsh words which appear to be aimed at the bodies responsible for the vocational training of entrants to the two branches of the legal profession in England and Wales when he refers to "law graduates finding themselves 'squeezed out of training places'". He goes on to refer to what he sees as a chaotic system of legal education and training.

In September 1982 3,304 students started on courses in preparation for the final examination at the College of Law or at one of the seven polytechnics approved for the purpose. Prior to that in 1982, 2,613 law graduates had applied for and been granted certificates that they had obtained qualifying law degrees and thereby completed the academic stage of training. Non-law graduates must pass a common professional examination in the six "core" legal subjects, normally after a year's course, before they can attend the final course. True, there are also school-leaver entrants: in 1982 six received certificates of eligibility to start training as would-be solicitors.

If Mr Elliot favours an all-graduate entry to the legal profession the Law Society must respectfully disagree with him. Yours faithfully, CHRISTOPHER SNOWLING, Secretary, Education and Training, The Law Society.

LETTERS TO THE EDITOR

The state of English, as she is taught

Sir, - So there is "a crisis of English" (*THE*, February 11). There are university students of English who have not read *The Waste Land*, the *Ode to Autumn* and *Dombey and Son* (David Holbrook), others by whom "sentences of any complexity are simply perceived as unreadable" (Colin McCabe). Eminent teachers of English are impelled to theorize abstrusely about the nature of their enterprise. May not the underlying reason for all this be that literary studies in our universities cannot really carry the weight they are expected to bear?

Myself a former and disillusioned teacher of literature (not English), I came many years ago to a conclusion that is by no means novel and is, I rather think, shared by many people who are not for that reason to be dismissed as illiterates or philistines: namely, that the proper place of literature is marginal, not central, and that there is no justification for providing for large numbers of students three-year courses in which the study of literature predominates.

And, in the impossibility of my retirement, I amuse myself by imagining schools of English (and, *mutatis mutandis*, of French, of German...) very different from those we have known for so long. Their object would be the study of England and the English. So the geography of the country, its history, its institutions, and its legal, political, economic and social structures would all have an important place in the syllabus. Literature and the arts would figure there also, for the whetting of appetites and with no examinations. But a compulsory and extensive direct experience, acquired during vacations, of the land and the people. No student would graduate without having travelled north, south, east and west, in search not of beauty spots and stately homes but of everyday realities. And not simply as remote spectators. Young ladies and gentlemen delicately nurtured in

the south of England would do a spell on a production line in Coventry, with a community project in non-European Bradford, or in a supplementary benefits office in the Welsh valleys or Strathclyde. Lasses and lads from Teesside would find themselves jobs in the bars of the Imperial Hotel in Torquay.

The recruitment of graduates from such schools to (for example) the Civil Service, industry, the media and the teaching profession would, I persuade myself, have salutary effects. But I know very well where Utopia is. Yours faithfully, L. C. SYKES, 3 Southmeads Close, Oadby, Leicestershire.

Sir, - Maureen Bell's claim (*THE*, February 18) that the restructuring of English studies in higher education advocated by such as Catherine Belsey will result in a liberated and democratic discipline is the reverse of the truth.

The changes proposed, with varying emphases, by Belsey and by a number of contributors to *Widdowson*, *Hawkes*, *McCabe* - to your symposium on "the crisis of English" (*THE*, February 11) will have, are already having, the effect of denying both male and female students - especially working-class, state-educated students - access to the traditional resources of English literary culture: resources which include not only traditional texts (there is, of course, no rigid concern but some authors are better than others) but also traditional ways of reading and experiencing literature. If Belsey for instance had her way - and make no mistake, she and those like her, are getting their way, in too many places - students will not be allowed (the prohibition will be subtle) to read the texts of, say, Leavis's "great tradition" except to deconstruct them. But they won't get much time even for that: what theory invades practice in the ways favoured by

Yours faithfully, NICHOLAS TREDELL, 7 Donegal Court, Pembury Road, Langney, Eastbourne.

Police college

Sir, - Peter Dawson's letter (*THE*, February 11) raises fundamental issues for teachers and for students. There is always a danger of adding to the open the racist sentiments and violence among a section of the Metropolitan Police. Those same malignant sentiments have again been exposed in this case, and it is therefore a greater pity that Natfie equivocates so much on the issue. Anything short of the reinstatement of John Fernandes is equivocation, and a disservice to a multicultural society.

Third, trade unions obviously have to protect job security and for this reason alone it is an interesting discussion, in which our students were involved, as to the best means of examining this course. A subsequent meeting has abolished one final paper in favour of dissertation and, in a fortnight's time, we are to discuss abolishing or transforming another paper.

This would, no doubt, be of only partial relief, were it not for the fact that the course is not the least bit interesting. Since the removal of the "state of redundancy" discussions in the history department at least have begun once more to centre on intellectual issues, debated according to academic criteria. This is a step forward. However, after the trauma of last year, while the "battle for jobs" has been temporarily won (thanks, in no small measure, to the self-sacrifice of colleagues), there remains a battle for values of even greater moment. Some of us feel that, under the new regime, only research which is lucrative or which catches the attention of the media will be encouraged, to the detriment of no doubt old-fashioned scholarship. This impression, strongly held by many in Aberdeen, is perhaps shared by colleagues at other universities in a similar situation, and deserves a constructive rather than a depressingly negative response.

Yours faithfully, WILLIAM SCOTT, Senior lecturer in history, University of Aberdeen.

Aberdeen's delay

Sir, - John Hargreaves's contribution to Don's Diary (February 11) certainly adds to the growing sense of academic "aggro" to that usually rather staid column. Might one add, regarding the meeting of Aberdeen University history department, so surprisingly held up to public attention, that, quite contrary to what Professor Hargreaves (who was not there) advances, the vote to delay for some months a final decision on the introduction of a new course was not a result of conservatism or timidity, brought about by a panic-stricken reaction to "the cuts". Rather it emerged from an interesting discussion, in which our students were involved, as to the best means of examining this course. A subsequent meeting has abolished one final paper in favour of dissertation and, in a fortnight's time, we are to discuss abolishing or transforming another paper.

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Yours faithfully, JUDITH HAMILTON, JOHN URE, National Association of Teachers in Further and Higher Education, North East London Polytechnic.

Letters for publication should arrive by Tuesday morning. They should be as short as possible and written on one side of the paper. The editor reserves the right to cut or amend them if necessary.

Union View

A suitable case for chauvinism

Your average person in the street, if asked what the National Union of Students does, may well refer to our campaigning activities, quite possibly in a less than supportive way. We are sometimes accused of being ungrateful, wasting taxpayers' money, continually demonstrating our discontent with government policies, and so on. If such critics could see how national unions of students operate in many East European countries, they might begin to see these as positive aspects of NUSUK.

After attending a recent meeting of European National Students' Unions, I have become a NUSUK chauvinist. We are a student-led, democratic, truly independent organization. Our equivalents in East Europe are led by the same people, year after year, nearly always trainee diplomats, well versed in extolling the virtues of their own systems of government, most of whom have not been students for many years, and would not know a student problem even if it were allowed to identify one in such an international forum.

International meetings of student leaders are dominated by the determination of the Eastern



Bloc delegations to produce consensus documents. The problem is that they criticize Western systems, as indeed do we, but they refuse to allow (let alone introduce themselves) any such criticism of their own governments. NUSUK has always insisted that such meetings should be valuable opportunities for a frank exchange of opinions on general student problems, and not an exercise in diplomatic skills.

I simply do not believe that there are no social problems for students in East Europe, not do I particularly want to sign documents on peace and disarmament that seek to place the entire blame for the arms race on the Western powers.

NUSUK has failed to get the format for such international gatherings significantly changed, and has therefore withdrawn its proposed candidacy to host the next European meeting in Britain and will be looking at the whole question of its future participation in such events. We would wish to maintain bilateral links with most national unions of students, but multinational gatherings are currently little more than junior (or not so junior) United Nations meetings, of little relevance to students as students.

NUSUK is in fact the only national union of students in the world which includes all post-school sectors of education and members of every conceivable political group; our structures are democratic and we are independent of the Government. There are certainly areas of criticism, but there are far greater areas of praise than even I, as an NUSUK full-time officer, realized.

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